

SEQUENCE LISTING

<110> Millennium Pharmaceuticals, Inc.

McCarthy, Sean A
Fraser, Christopher C
Sharp, John D
Barnes, Thomas S
Kirst, Susan J
Mackay, Charles R
Myers, Paul S
Leiby, Kevin R
Wrighton, Nicolas
Goodearl, Andrew
Holtzman, Douglas A

<120> NOVEL GENES ENCODING PROTEINS HAVING
PROGNOSTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC, AND OTHER
USES.

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Gln Pro Ala Asp Ser Gly Glu Lys Lys Lys Ser Phe Ser Thr Phe Gly				940
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 <213> Homo sapiens

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<212> PRT
<213> Homo sapiens

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 20          25          30
Arg Ile Tyr Glu Glu Gln Arg Val Gly Ser Val Ile Ala Arg Leu Ser
 35          40          45
Glu Asp Val Ala Asp Val Leu Lys Leu Pro Asn Pro Ser Thr Val
 50          55          60
Arg Phe Arg Ala Met Gln Arg Gly Asn Ser Pro Leu Leu Val Val Asn
 65          70          75          80
Glu Asp Asn Gly Glu Ile Ser Ile Gly Ala Thr Ile Asp Arg Glu Gln
 85          90          95
Leu Cys Gln Lys Asn Leu Asn Cys Ser Ile Glu Phe Asp Val Ile Thr
100          105          110
Leu Pro Thr Glu His Leu Gln Leu Phe His Ile Glu Val Glu Val Leu
115          120          125
Asp Ile Asn Asp Asn Ser Pro Gln Phe Ser Arg Ser Leu Ile Pro Ile

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Ala Phe Asp Pro Asp	Val Gly Glu Asn Ser	Leu His Thr Tyr Ser Leu		
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Ser Ala Asn Asp Phe	Phe Asn Ile Glu Val Arg	Thr Arg Thr Asp Gly		
	180	185	190	
Ala Lys Tyr Ala Glu	Leu Ile Val Val Arg	Glu Leu Asp Arg Glu Leu		
	195	200	205	
Lys Ser Ser Tyr Glu	Leu Gln Leu Thr Ala	Ser Asp Met Gly Val Pro		
	210	215	220	
Gln Arg Ser Gly Ser	Ser Ile Leu Lys Ile	Ser Ile Ser Asp Ser Asn		
225	230	235	240	
Asp Asn Ser Pro Ala	Phe Glu Gln Gln Ser	Tyr Ile Ile Gln Leu Leu		
	245	250	255	
Glu Asn Ser Pro Val	Gly Thr Leu Leu Leu Asp	Leu Asn Ala Thr Asp		
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Pro Asp Glu Gly Ala	Asn Gly Lys Ile Val Tyr	Ser Phe Ser Ser His		
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Val Ser Pro Lys Ile	Met Glu Thr Phe Lys	Ile Asp Ser Glu Arg Gly		
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His Leu Thr Leu Phe	Lys Gln Val Asp Tyr	Glu Ile Thr Lys Ser Tyr		
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Glu Ile Asp Val Gln	Ala Gln Asp Leu Gly	Pro Asn Ser Ile Pro Ala		
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His Cys Lys Ile Ile	Ile Lys Val Val Asp	Val Asn Asp Asn Lys Pro		
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Glu Ile Asn Ile Asn	Leu Met Ser Pro Gly	Lys Glu Glu Ile Ser Tyr		
	355	360	365	
Ile Phe Glu Gly Asp	Pro Ile Asp Thr Phe	Val Ala Leu Val Arg Val		
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Gln Asp Lys Asp Ser	Gly Leu Asn Gly Glu	Ile Val Cys Lys Leu His		
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Gly His Gly His Phe	Lys Leu Gln Lys Thr	Tyr Glu Asn Asn Tyr Leu		
	405	410	415	
Ile Leu Thr Asn Ala	Thr Leu Asp Arg Glu	Lys Arg Ser Glu Tyr Ser		
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Leu Thr Val Ile Ala	Glu Asp Arg Gly Thr	Pro Ser Leu Ser Thr Val		
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Lys His Phe Thr Val	Gln Ile Asn Asp Ile	Asn Asp Asn Pro Pro His		
	450	455	460	
Phe Gln Arg Ser Arg	Tyr Glu Phe Val Ile	Ser Glu Asn Asn Ser Pro		
465	470	475	480	
Gly Ala Tyr Ile Thr	Thr Val Thr Ala Thr	Asp Pro Asp Leu Gly Glu		
	485	490	495	
Asn Gly Gln Val Thr	Tyr Thr Ile Leu Glu	Ser Phe Ile Leu Gly Ser		
	500	505	510	
Ser Ile Thr Thr Tyr	Val Thr Ile Asp Pro	Ser Asn Gly Ala Ile Tyr		
	515	520	525	
Ala Leu Arg Ile Phe	Asp His Glu Glu Val	Ser Gln Ile Thr Phe Val		
	530	535	540	
Val Glu Ala Arg Asp	Gly Gly Ser Pro Lys	Gln Leu Val Ser Asn Thr		
545	550	555	560	
Thr Val Val Leu Thr	Ile Ile Asp Glu Asn	Asp Asn Val Pro Val Val		
	565	570	575	
Ile Gly Pro Ala Leu	Arg Asn Asn Thr Ala	Glu Ile Thr Ile Pro Lys		

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Ala	Ser	Thr	His	Phe	Gln	Asn	Pro	Thr	Thr	Asn	Cys	Gly	Pro	Pro	Leu
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<210> 35

<211> 1107

<212> PRT

<213> Homo sapiens

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Asn	Pro	Ser	Thr	Val	Arg	Phe	Arg	Ala	Met	Gln	Arg	Gly	Asn	Ser	Pro
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Leu	Leu	Val	Val	Asn	Glu	Asp	Asn	Gly	Glu	Ile	Ser	Ile	Gly	Ala	Thr
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Ile	Asp	Arg	Glu	Gln	Leu	Cys	Gln	Lys	Asn	Leu	Asn	Cys	Ser	Ile	Glu
65					70					75					80
Phe	Asp	Val	Ile	Thr	Leu	Pro	Thr	Glu	His	Leu	Gln	Leu	Phe	His	Ile
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Glu	Val	Glu	Val	Leu	Asp	Ile	Asn	Asp	Asn	Ser	Pro	Gln	Phe	Ser	Arg
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Ser	Leu	Ile	Pro	Ile	Glu	Ile	Ser	Glu	Ser	Ala	Ala	Val	Gly	Thr	Arg
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Ile	Pro	Leu	Asp	Ser	Ala	Phe	Asp	Pro	Asp	Val	Gly	Glu	Asn	Ser	Leu
	130					135					140				
His	Thr	Tyr	Ser	Leu	Ser	Ala	Asn	Asp	Phe	Phe	Asn	Ile	Glu	Val	Arg
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Thr	Arg	Thr	Asp	Gly	Ala	Lys	Tyr	Ala	Glu	Leu	Ile	Val	Val	Arg	Glu
				165					170					175	
Leu	Asp	Arg	Glu	Leu	Lys	Ser	Ser	Tyr	Glu	Leu	Gln	Leu	Thr	Ala	Ser
			180					185					190		
Asp	Met	Gly	Val	Pro	Gln	Arg	Ser	Gly	Ser	Ser	Ile	Leu	Lys	Ile	Ser
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Ile	Ser	Asp	Ser	Asn	Asp	Asn	Ser	Pro	Ala	Phe	Glu	Gln	Gln	Ser	Tyr
	210					215					220				

Ile	Ile	Gln	Leu	Leu	Glu	Asn	Ser	Pro	Val	Gly	Thr	Leu	Leu	Leu	Asp
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Leu	Asn	Ala	Thr	Asp	Pro	Asp	Glu	Gly	Ala	Asn	Gly	Lys	Ile	Val	Tyr
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Asn	Ser	Ile	Pro	Ala	His	Cys	Lys	Ile	Ile	Ile	Lys	Val	Val	Asp	Val
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Asn	Asp	Asn	Lys	Pro	Glu	Ile	Asn	Ile	Asn	Leu	Met	Ser	Pro	Gly	Lys
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Glu	Glu	Ile	Ser	Tyr	Ile	Phe	Glu	Gly	Asp	Pro	Ile	Asp	Thr	Phe	Val
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Ala	Leu	Val	Arg	Val	Gln	Asp	Lys	Asp	Ser	Gly	Leu	Asn	Gly	Glu	Ile
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Arg	Ser	Glu	Tyr	Ser	Leu	Thr	Val	Ile	Ala	Glu	Asp	Arg	Gly	Thr	Pro
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Ser	Leu	Ser	Thr	Val	Lys	His	Phe	Thr	Val	Gln	Ile	Asn	Asp	Ile	Asn
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<210> 38

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<212> PRT

<213> Homo sapiens

<400> 38

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Gln	Ile	His	Lys	Gly	Asp	Ile	Thr	Leu	Val	Pro	Thr	Ile	Asn	Gly	Thr
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Leu	Pro	Ile	Arg	Ser	His	His	Arg	Ser	Ser	Pro	Ser	Ser	Ser	Pro	Thr
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Asn	Phe	Ser	Leu	Glu	Leu	Thr	His	Ala	Thr	Pro	Ala	Val	Glu	Val	Ser
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Gln	Leu	Leu	Ser	Met	Leu	His	Gln	Gly	Gln	Tyr	Gln	Pro	Arg	Pro	Ser
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Phe	Arg	Gly	Asn	Lys	Tyr	Ser	Arg	Ser	Tyr	Arg	Tyr	Ala	Leu	Gln	Asp
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Met	Asp	Lys	Phe	Ser	Leu	Lys	Asp	Ser	Gly	Arg	Gly	Asp	Ser	Glu	Ala
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Gly	Asp	Ser	Asp	Tyr	Asp	Leu	Gly	Arg	Asp	Ser	Pro	Ile	Asp	Arg	Leu
145					150					155					160
Pro	Ala	Ala	Met	Arg	Leu	Cys	Thr	Glu	Glu	Cys	Arg	Val	Leu	Gly	His
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Ser	Asp	Gln	Cys	Trp	Met	Pro	Pro	Leu	Pro	Ser	Pro	Ser	Ser	Asp	Tyr
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Gln	Gln	His	Pro	His	Gln	Ser	Leu	Glu	Asp	Asp	Ala	Gln	Pro	Ala	Asp
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Ser	Glu	Met	Ser	Ser	Val	Phe	Gln	Arg	Leu	Leu	Pro	Pro	Ser	Leu	Asp
				245					250					255	
Thr	Asn	Cys	Gly	Pro	Pro	Leu	Gly	Thr	His	Ser	Ser	Val	Gln	Pro	Ser
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 Leu Gln Asp Val Arg Gln Ser
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<212> DNA

<213> Homo sapiens

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<212> PRT
<213> Homo sapiens

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Gly Gly Thr Gln Ile Thr Pro Leu Asn Asp Asn Val Thr Ile Phe Cys
 35          40          45
Asn Ile Phe Tyr Ser Gln Pro Leu Asn Ile Thr Ser Met Gly Ile Thr
 50          55          60
Trp Phe Trp Lys Ser Leu Thr Phe Asp Lys Glu Val Lys Val Phe Glu
 65          70          75          80
Phe Phe Gly Asp His Gln Glu Ala Phe Arg Pro Gly Ala Ile Val Ser
 85          90          95
Pro Trp Arg Leu Lys Ser Gly Asp Ala Ser Leu Arg Leu Pro Gly Ile
100          105          110
Gln Leu Glu Glu Ala Gly Glu Tyr Arg Cys Glu Val Val Val Thr Pro
115          120          125
Leu Lys Ala Gln Gly Thr Val Gln Leu Glu Val Val Ala Ser Pro Ala
130          135          140
Ser Arg Leu Leu Leu Asp Gln Val Gly Met Lys Glu Asn Glu Asp Lys
145          150          155          160
Tyr Met Cys Glu Ser Ser Gly Phe Tyr Pro Glu Ala Ile Asn Ile Thr
165          170          175
Trp Glu Lys Gln Thr Gln Lys Phe Pro His Pro Ile Glu Ile Ser Glu
180          185          190
Asp Val Ile Thr Gly Pro Thr Ile Lys Asn Met Asp Gly Thr Phe Asn
195          200          205
Val Thr Ser Cys Leu Lys Leu Asn Ser Ser Gln Glu Asp Pro Gly Thr
210          215          220
Val Tyr Gln Cys Val Val Arg His Ala Ser Leu His Thr Pro Leu Arg
225          230          235          240
Ser Asn Phe Thr Leu Thr Ala Ala Arg His Ser Leu Ser Glu Thr Glu
245          250          255
Lys Thr Asp Asn Phe Ser Ile His Trp Trp Pro Ile Ser Phe Ile Gly
260          265          270
Val Gly Leu Val Leu Leu Ile Val Leu Ile Pro Trp Lys Lys Val Arg
275          280          285

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Gly Ser Lys Ala Lys Phe Ser Pro Val Ser Trp Ala Ser Lys Lys Leu
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 Gly Lys Asp Phe Val Ser Pro Ser Ser Pro Ser Gly Val Gly Asn Val

 Gly Cys Val Pro Ile Gln Phe Pro Ile Thr Glu Asp Leu Ala Val Thr
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 Tyr His Leu Thr Ser Val Trp Trp Phe Val Thr Leu Gly
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 <211> 341
 <212> PRT
 <213> Homo sapiens

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 Asn Ile Thr Ser Met Gly Ile Thr Trp Phe Trp Lys Ser Leu Thr Phe
 35 40 45
 Asp Lys Glu Val Lys Val Phe Glu Phe Phe Gly Asp His Gln Glu Ala
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 Phe Arg Pro Gly Ala Ile Val Ser Pro Trp Arg Leu Lys Ser Gly Asp
 65 70 75 80
 Ala Ser Leu Arg Leu Pro Gly Ile Gln Leu Glu Glu Ala Gly Glu Tyr
 85 90 95
 Arg Cys Glu Val Val Val Thr Pro Leu Lys Ala Gln Gly Thr Val Gln
 100 105 110
 Leu Glu Val Val Ala Ser Pro Ala Ser Arg Leu Leu Leu Asp Gln Val
 115 120 125
 Gly Met Lys Glu Asn Glu Asp Lys Tyr Met Cys Glu Ser Ser Gly Phe
 130 135 140
 Tyr Pro Glu Ala Ile Asn Ile Thr Trp Glu Lys Gln Thr Gln Lys Phe
 145 150 155 160
 Pro His Pro Ile Glu Ile Ser Glu Asp Val Ile Thr Gly Pro Thr Ile
 165 170 175
 Lys Asn Met Asp Gly Thr Phe Asn Val Thr Ser Cys Leu Lys Leu Asn
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 Ser Ser Gln Glu Asp Pro Gly Thr Val Tyr Gln Cys Val Val Arg His
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 Ala Ser Leu His Thr Pro Leu Arg Ser Asn Phe Thr Leu Thr Ala Ala
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 Arg His Ser Leu Ser Glu Thr Glu Lys Thr Asp Asn Phe Ser Ile His
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 Trp Trp Pro Ile Ser Phe Ile Gly Val Gly Leu Val Leu Leu Ile Val
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 Leu Ile Pro Trp Lys Lys Val Arg Gly Ser Lys Ala Lys Phe Ser Pro
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 Gln Ala Ser Arg Asp Arg Pro Ala Gly Lys Asp Phe Val Ser Pro Ser
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Ser Pro Ser Gly Val Gly Asn Val Gly Cys Val Pro Ile Gln Phe Pro
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 <213> Homo sapiens

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 Cys Glu Val Val Thr Pro Leu Lys Ala Gln Gly Thr Val Gln Leu
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 Glu Val Val Ala Ser Pro Ala Ser Arg Leu Leu Leu Asp Gln Val Gly
 115 120 125
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 Pro Glu Ala Ile Asn Ile Thr Trp Glu Lys Gln Thr Gln Lys Phe Pro
 145 150 155 160
 His Pro Ile Glu Ile Ser Glu Asp Val Ile Thr Gly Pro Thr Ile Lys
 165 170 175
 Asn Met Asp Gly Thr Phe Asn Val Thr Ser Cys Leu Lys Leu Asn Ser
 180 185 190
 Ser Gln Glu Asp Pro Gly Thr Val Tyr Gln Cys Val Val Arg His Ala
 195 200 205
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 35 40 45
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 Arg Cys Glu Val

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 <211> 68
 <212> PRT
 <213> Homo sapiens

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 Ser Cys Leu Lys Leu Asn Ser Ser Gln Glu Asp Pro Gly Thr Val Tyr
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 Gln Cys Val Val
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<210> 60
 <211> 83
 <212> PRT
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<400> 60

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<212> DNA

<213> Homo sapiens

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<210> 73
 <211> 715
 <212> PRT
 <213> Homo sapiens

<400> 73
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 35 40 45
 Asp Ser Gly Thr Met Thr Ser Lys Asn Tyr Pro Gly Thr Tyr Pro Asn
 50 55 60
 His Thr Val Cys Glu Lys Thr Ile Thr Val Pro Lys Gly Lys Arg Leu
 65 70 75 80
 Ile Leu Arg Leu Gly Asp Leu Asp Ile Glu Ser Gln Thr Cys Ala Ser
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 Asp Tyr Leu Leu Phe Thr Ser Ser Ser Asp Gln Tyr Gly Pro Tyr Cys
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 Gly Ser Met Thr Val Pro Lys Glu Leu Leu Leu Asn Thr Ser Glu Val
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 Thr Val Arg Phe Glu Ser Gly Ser His Ile Ser Gly Arg Gly Phe Leu
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 Arg Ala Ser His Tyr Leu Lys Thr Glu Tyr Ser Lys Phe Cys Pro Ala
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 Gly Cys Arg Asp Val Ala Gly Asp Ile Ser Gly Asn Met Val Asp Gly
 180 185 190
 Tyr Arg Asp Thr Ser Leu Leu Cys Lys Ala Ala Ile His Ala Gly Ile
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 210 215 220
 Ile Ser Arg Tyr Glu Gly Ile Leu Ala Asn Gly Val Leu Ser Arg Asp
 225 230 235 240
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 Arg Ser Leu Ser Phe Glu Pro Asp Gly Gln Ile Arg Ala Ser Ser Ser
 260 265 270
 Trp Gln Ser Val Asn Glu Ser Gly Asp Gln Val His Trp Ser Pro Gly
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 Gln Ala Arg Leu Gln Asp Gln Gly Pro Ser Trp Ala Ser Gly Asp Ser
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 Lys Lys Lys Ile Thr Gly Ile Arg Thr Thr Gly Ser Thr Gln Ser Asn
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Pro	Val	Ala	Gly	Val	Gly	Ala	Gln	Asp	Gly	Asp	Tyr	Gln	Arg	Pro	His
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Ser	Ala	Gln	Pro	Ala	Asp	Arg	Gly	Tyr	Asp	Arg	Pro	Lys	Ala	Val	Ser
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Ala	Leu	Ala	Thr	Glu	Ser	Gly	His	Pro	Asp	Ser	Gln	Lys	Pro	Pro	Thr
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His	Pro	Gly	Thr	Ser	Asp	Ser	Tyr	Ser	Ala	Pro	Arg	Asp	Cys	Leu	Thr
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 <213> Homo sapiens

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 <212> PRT
 <213> Homo sapiens

<400> 75

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Val	Cys	Glu	Lys	Thr	Ile	Thr	Val	Pro	Lys	Gly	Lys	Arg	Leu	Ile	Leu
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Arg	Phe	Glu	Ser	Gly	Ser	His	Ile	Ser	Gly	Arg	Gly	Phe	Leu	Leu	Thr
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Ser	His	Tyr	Leu	Lys	Thr	Glu	Tyr	Ser	Lys	Phe	Cys	Pro	Ala	Gly	Cys
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Asp	Thr	Ser	Leu	Leu	Cys	Lys	Ala	Ala	Ile	His	Ala	Gly	Ile	Ile	Ala
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Lys	Ile	Thr	Gly	Ile	Arg	Thr	Thr	Gly	Ser	Thr	Gln	Ser	Asn	Phe	Asn
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Trp	Lys	Thr	Tyr	Lys	Gly	Ile	Val	Asn	Asn	Glu	Glu	Lys	Val	Phe	Gln
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Lys	Lys	Glu	Asp	Glu	Thr	Ile	Thr	Arg	Pro	Ile	Pro	Ser	Glu	Glu	Thr
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Ala	Thr	Glu	Ser	Gly	His	Pro	Asp	Ser	Gln	Lys	Pro	Pro	Thr	His	Pro
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Gly	Thr	Ser	Asp	Ser	Tyr	Ser	Ala	Pro	Arg	Asp	Cys	Leu	Thr	Pro	Leu
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<210> 76
 <211> 421
 <212> PRT
 <213> Homo sapiens

<400> 76

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Val	Cys	Glu	Lys	Thr	Ile	Thr	Val	Pro	Lys	Gly	Lys	Arg	Leu	Ile	Leu
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Arg	Leu	Gly	Asp	Leu	Asp	Ile	Glu	Ser	Gln	Thr	Cys	Ala	Ser	Asp	Tyr
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Met	Thr	Val	Pro	Lys	Glu	Leu	Leu	Leu	Asn	Thr	Ser	Glu	Val	Thr	Val
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Arg	Phe	Glu	Ser	Gly	Ser	His	Ile	Ser	Gly	Arg	Gly	Phe	Leu	Leu	Thr
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Ser	Ala	Glu	Phe	Thr	Ile	Ser	Tyr	Asp	Asn	Glu	Lys	Glu	Met	Thr	Gln
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Lys	Leu	Asp	Leu	Ile	Thr	Ser	Asp	Met	Ala	Asp	Tyr	Gln	Gln	Pro	Leu
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Met	Asp	Thr	Asp	Ala	Glu	Glu	Ala	Gly	Val	Ser	Thr	Asp	Ala	Gly	Gly
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His	Tyr	Asp	Cys	Pro	Gln	Arg	Ala	Gly	Arg	His	Glu	Tyr	Ala	Leu	Pro
			100					105						110	
Leu	Ala	Pro	Pro	Glu	Pro	Glu	Tyr	Ala	Thr	Pro	Ile	Val	Glu	Arg	His
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Gly	Pro	Gln	Pro	Gly	His	Lys	His	Ser	Leu	Ser	Ser	Gly	Gly	Phe	Ser
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Pro	Val	Ala	Gly	Val	Gly	Ala	Gln	Asp	Gly	Asp	Tyr	Gln	Arg	Pro	His
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Ser	Ala	Gln	Pro	Ala	Asp	Arg	Gly	Tyr	Asp	Arg	Pro	Lys	Ala	Val	Ser
		180						185					190		
Ala	Leu	Ala	Thr	Glu	Ser	Gly	His	Pro	Asp	Ser	Gln	Lys	Pro	Pro	Thr
	195						200					205			
His	Pro	Gly	Thr	Ser	Asp	Ser	Tyr	Ser	Ala	Pro	Arg	Asp	Cys	Leu	Thr
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<210> 81

<211> 4074

<212> DNA

<213> Homo sapiens

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<400> 81

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<210> 82
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<212> DNA
<213> Homo sapiens

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<210> 83
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<213> Homo sapiens

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 20           25           30
Lys Ser Asn Asp Gly Phe Thr Thr Thr Arg Ser Tyr Gly Thr Val Ser
 35           40           45
Gln Ile Phe Gly Ser Ser Ser Pro Ser Pro Asn Gly Phe Ile Thr Thr
 50           55           60
Arg Ser Tyr Gly Thr Val Cys Pro Lys Asp Trp Glu Phe Tyr Gln Ala
 65           70           75           80
Arg Cys Phe Phe Leu Ser Thr Ser Glu Ser Ser Trp Asn Glu Ser Arg
 85           90           95
Asp Phe Cys Lys Gly Lys Gly Ser Thr Leu Ala Ile Val Asn Thr Pro
100          105          110
Glu Lys Leu Lys Phe Leu Gln Asp Ile Thr Asp Ala Glu Lys Tyr Phe
115          120          125
Ile Gly Leu Ile Tyr His Arg Glu Glu Lys Arg Trp Arg Trp Ile Asn
130          135          140

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Asn Ser Val Phe Asn Gly Asn Val Thr Asn Gln Asn Gln Asn Phe Asn
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 <212> PRT
 <213> Homo sapiens

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 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Trp Glu Phe Tyr Gln Ala Arg Cys Phe Phe Leu Ser Thr Ser Glu Ser
 50 55 60
 Ser Trp Asn Glu Ser Arg Asp Phe Cys Lys Gly Lys Gly Ser Thr Leu
 65 70 75 80
 Ala Ile Val Asn Thr Pro Glu Lys Leu Lys Phe Leu Gln Asp Ile Thr
 85 90 95
 Asp Ala Glu Lys Tyr Phe Ile Gly Leu Ile Tyr His Arg Glu Glu Lys
 100 105 110
 Arg Trp Arg Trp Ile Asn Asn Ser Val Phe Asn Gly Asn Val Thr Asn
 115 120 125
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 145 150 155 160
 Ala Lys

<210> 86
 <211> 187
 <212> PRT
 <213> Homo sapiens

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			20					25					30			
Lys	Ser	Asn	Asp	Gly	Phe	Thr	Thr	Thr	Arg	Ser	Tyr	Gly	Thr	Val	Ser	
		35					40					45				
Gln	Ile	Phe	Gly	Ser	Ser	Ser	Pro	Ser	Pro	Asn	Gly	Phe	Ile	Thr	Thr	
	50					55				60						
Arg	Ser	Tyr	Gly	Thr	Val	Cys	Pro	Lys	Asp	Trp	Glu	Phe	Tyr	Gln	Ala	
65					70				75						80	
Arg	Cys	Phe	Phe	Leu	Ser	Thr	Ser	Glu	Ser	Ser	Trp	Asn	Glu	Ser	Arg	
				85				90						95		
Asp	Phe	Cys	Lys	Gly	Lys	Gly	Ser	Thr	Leu	Ala	Ile	Val	Asn	Thr	Pro	
			100					105					110			
Glu	Lys	Leu	Phe	Leu	Gln	Asp	Ile	Thr	Asp	Ala	Glu	Lys	Tyr	Phe	Ile	
		115					120					125				
Gly	Leu	Ile	Tyr	His	Arg	Glu	Glu	Lys	Arg	Trp	Arg	Trp	Ile	Asn	Asn	
	130					135					140					
Ser	Val	Phe	Asn	Gly	Asn	Val	Thr	Asn	Gln	Asn	Gln	Asn	Phe	Asn	Cys	
145					150				155						160	
Ala	Thr	Ile	Gly	Leu	Thr	Lys	Thr	Phe	Asp	Ala	Ala	Ser	Cys	Asp	Ile	
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<220>

<223> Unknown

<400> 87

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<210> 88

<211> 190

<212> PRT

<213> Homo sapiens

<400> 88

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			20					25					30			
Lys	Ser	Asn	Asp	Gly	Phe	Val	Pro	Thr	Glu	Ser	Tyr	Gly	Thr	Thr	Ser	
		35					40					45				
Val	Gln	Asn	Val	Ser	Gln	Ile	Phe	Gly	Arg	Asn	Asp	Glu	Ser	Thr	Met	
	50					55				60						
Pro	Thr	Arg	Ser	Tyr	Gly	Thr	Val	Cys	Pro	Arg	Asn	Trp	Asp	Phe	His	
65					70				75						80	
Gln	Gly	Lys	Cys	Phe	Phe	Phe	Ser	Phe	Ser	Glu	Ser	Pro	Trp	Lys	Asp	
				85				90						95		
Ser	Met	Asp	Tyr	Cys	Ala	Thr	Gln	Gly	Ser	Thr	Leu	Ala	Ile	Val	Asn	
			100					105					110			
Thr	Pro	Glu	Lys	Leu	Lys	Tyr	Leu	Gln	Asp	Ile	Ala	Gly	Ile	Glu	Asn	
		115					120					125				
Tyr	Phe	Ile	Gly	Leu	Val	Arg	Gln	Pro	Gly	Glu	Lys	Lys	Trp	Arg	Trp	
	130					135						140				

Ile	Asn	Asn	Ser	Val	Phe	Asn	Gly	Asn	Val	Thr	Asn	Gln	Asp	Gln	Asn
145					150					155					160
Phe	Asp	Cys	Val	Thr	Ile	Gly	Leu	Thr	Lys	Thr	Tyr	Asp	Ala	Ala	Ser
				165					170					175	
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			180					185					190		

<210> 89

<220>

<223> Unknown

<400> 89

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<210> 90

<220>

<223> Unknown

<400> 90

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<210> 91

<211> 4018

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(4018)

<223> n = A,T,C or G

<400> 91

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<211> 534

<212> DNA

<213> Homo sapiens

<400> 92

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 cgttggatca acaactctgt gttcaatggc aagtacgtga acatgccaca gtttcctggg 480
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<211> 178

<212> PRT

<213> Homo sapiens

<400> 93

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			20					25					30		
Lys	Ser	Asn	Asp	Gly	Phe	Thr	Thr	Thr	Arg	Ser	Tyr	Gly	Thr	Val	Ser
		35					40					45			
Gln	Ile	Phe	Gly	Ser	Ser	Ser	Pro	Ser	Pro	Asn	Gly	Phe	Ile	Thr	Thr
	50					55				60					
Arg	Ser	Tyr	Gly	Thr	Val	Cys	Pro	Lys	Asp	Trp	Glu	Phe	Tyr	Gln	Ala
65					70				75					80	
Arg	Cys	Phe	Phe	Leu	Ser	Thr	Ser	Glu	Ser	Ser	Trp	Asn	Glu	Ser	Arg
				85				90					95		
Asp	Phe	Cys	Lys	Gly	Lys	Gly	Ser	Thr	Leu	Ala	Ile	Val	Asn	Thr	Pro
			100				105						110		
Glu	Lys	Leu	Lys	Phe	Leu	Gln	Asp	Ile	Thr	Asp	Ala	Glu	Lys	Tyr	Phe
		115					120					125			
Ile	Gly	Leu	Ile	Tyr	His	Arg	Glu	Glu	Lys	Arg	Trp	Arg	Trp	Ile	Asn
	130					135					140				
Asn	Ser	Val	Phe	Asn	Gly	Lys	Tyr	Val	Asn	Met	Pro	Gln	Phe	Pro	Gly
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Leu Glu

<210> 94

<211> 21

<212> PRT

<213> Homo sapiens

<400> 94

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Phe	Leu	Leu	Tyr	Phe											
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<210> 95

<211> 151

<212> PRT

<213> Homo sapiens

<400> 95

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			20					25					30				
Gly	Phe	Ile	Thr	Thr	Arg	Ser	Tyr	Gly	Thr	Val	Cys	Pro	Lys	Asp	Trp		
		35					40					45					
Glu	Phe	Tyr	Gln	Ala	Arg	Cys	Phe	Phe	Leu	Ser	Thr	Ser	Glu	Ser	Ser		
	50					55					60						
Trp	Asn	Glu	Ser	Arg	Asp	Phe	Cys	Lys	Gly	Lys	Gly	Ser	Thr	Leu	Ala		
65					70				75						80		
Ile	Val	Asn	Thr	Pro	Glu	Lys	Leu	Lys	Phe	Leu	Gln	Asp	Ile	Thr	Asp		
			85					90					95				
Ala	Glu	Lys	Tyr	Phe	Ile	Gly	Leu	Ile	Tyr	His	Arg	Glu	Glu	Lys	Arg		
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Trp	Arg	Trp	Ile	Asn	Asn	Ser	Val	Phe	Asn	Gly	Lys	Tyr	Val	Asn	Met		
	115					120					125						
Pro	Gln	Phe	Pro	Gly	Asp	Leu	Gly	Leu	Leu	Gln	Lys	Thr	Lys	Pro	Glu		
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<210> 97

<211> 495

<212> DNA

<213> Homo sapiens

<400> 97

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495

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<212> PRT
<213> Homo sapiens

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35 40 45
Pro Lys Asp Trp Glu Phe Tyr Gln Ala Arg Cys Phe Phe Leu Ser Thr
50 55 60
Ser Glu Ser Ser Trp Asn Glu Ser Arg Asp Phe Cys Lys Gly Lys Gly
65 70 75 80
Ser Thr Leu Ala Ile Val Asn Thr Pro Glu Lys Leu Lys Phe Leu Gln
85 90 95
Asp Ile Thr Asp Ala Glu Lys Tyr Phe Ile Gly Leu Ile Tyr His Arg
100 105 110
Glu Glu Lys Arg Trp Arg Trp Ile Asn Asn Ser Val Phe Asn Gly Asn
115 120 125
Val Thr Asn Gln Asn Gln Asn Phe Asn Cys Ala Thr Ile Gly Leu Thr
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Lys Thr Phe Asp Ala Ala Ser Cys Asp Ile Ser Tyr Arg Arg Ile Cys
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Glu Lys Asn Ala Lys
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<210> 99
<211> 21
<212> PRT
<213> Homo sapiens

<400> 99
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Phe Leu Leu Tyr Phe
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<210> 100
<211> 138
<212> PRT
<213> Homo sapiens

<400> 100
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35 40 45
Cys Lys Gly Lys Gly Ser Thr Leu Ala Ile Val Asn Thr Pro Glu Lys

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Leu Lys Phe Leu Gln Asp Ile Thr Asp Ala Glu Lys Tyr Phe Ile Gly				
65		70	75	80
Leu Ile Tyr His Arg Glu Glu Lys Arg Trp Arg Trp Ile Asn Asn Ser				
	85	90	95	
Val Phe Asn Gly Asn Val Thr Asn Gln Asn Gln Asn Phe Asn Cys Ala				
	100	105	110	
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 <213> Homo sapiens

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 <223> n = A,T,C or G

<400> 101

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 <211> 465
 <212> DNA
 <213> Homo sapiens

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 <211> 155
 <212> PRT
 <213> Homo sapiens

<400> 103			
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Lys	Ser	Asn	Asp	Gly	Phe	Thr	Thr	Thr	Arg	Ser	Tyr	Gly	Thr	Val	Cys
		35					40					45			
Pro	Lys	Asp	Trp	Glu	Phe	Tyr	Gln	Ala	Arg	Cys	Phe	Phe	Leu	Ser	Thr
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Ser	Glu	Ser	Ser	Trp	Asn	Glu	Ser	Arg	Asp	Phe	Cys	Lys	Gly	Lys	Gly
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Ser	Thr	Leu	Ala	Ile	Val	Asn	Thr	Pro	Glu	Lys	Leu	Lys	Phe	Leu	Gln
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<210> 104
 <211> 21
 <212> PRT
 <213> Homo sapiens

<400> 104
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<210> 105
 <211> 128
 <212> PRT
 <213> Homo sapiens

<400> 105
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 35 40 45
 Cys Lys Gly Lys Gly Ser Thr Leu Ala Ile Val Asn Thr Pro Glu Lys
 50 55 60
 Leu Lys Phe Leu Gln Asp Ile Thr Asp Ala Glu Lys Tyr Phe Ile Gly
 65 70 75 80
 Leu Ile Tyr His Arg Glu Glu Lys Arg Trp Arg Trp Ile Asn Asn Ser
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<210> 106

<211> 3925
 <212> DNA
 <213> Homo sapiens

<220>
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 <222> (1)...(3925)
 <223> n = A,T,C or G

<400> 106

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<210> 107
 <211> 435
 <212> DNA
 <213> Homo sapiens

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<400> 107
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gagaagaatg ccaaa 435

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<210> 108
 <211> 145
 <212> PRT
 <213> Homo sapiens

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<400> 108
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Val Val Gly Met Thr Leu Phe Leu Leu Tyr Phe Cys Pro Lys Asp Trp
          20           25           30
Glu Phe Tyr Gln Ala Arg Cys Phe Phe Leu Ser Thr Ser Glu Ser Ser
          35           40           45
Trp Asn Glu Ser Arg Asp Phe Cys Lys Gly Lys Gly Ser Thr Leu Ala
          50           55           60
Ile Val Asn Thr Pro Glu Lys Leu Lys Phe Leu Gln Asp Ile Thr Asp
65           70           75           80
Ala Glu Lys Tyr Phe Ile Gly Leu Ile Tyr His Arg Glu Glu Lys Arg
          85           90           95
Trp Arg Trp Ile Asn Asn Ser Val Phe Asn Gly Asn Val Thr Asn Gln
          100          105          110
Asn Gln Asn Phe Asn Cys Ala Thr Ile Gly Leu Thr Lys Thr Phe Asp
          115          120          125

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Ala Ala Ser Cys Asp Ile Ser Tyr Arg Arg Ile Cys Glu Lys Asn Ala
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Lys
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<210> 109
 <211> 22
 <212> PRT
 <213> Homo sapiens

<400> 109

Ile Ser Gly Leu Ile Val Val Val Leu Lys Val Val Gly Met Thr Leu
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 Phe Leu Leu Tyr Phe Cys
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<210> 110
 <211> 117
 <212> PRT
 <213> Homo sapiens

<400> 110

Pro Lys Asp Trp Glu Phe Tyr Gln Ala Arg Cys Phe Phe Leu Ser Thr
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 20 25 30
 Ser Thr Leu Ala Ile Val Asn Thr Pro Glu Lys Leu Lys Phe Leu Gln
 35 40 45
 Asp Ile Thr Asp Ala Glu Lys Tyr Phe Ile Gly Leu Ile Tyr His Arg
 50 55 60
 Glu Glu Lys Arg Trp Arg Trp Ile Asn Asn Ser Val Phe Asn Gly Asn
 65 70 75 80
 Val Thr Asn Gln Asn Gln Asn Phe Asn Cys Ala Thr Ile Gly Leu Thr
 85 90 95
 Lys Thr Phe Asp Ala Ala Ser Cys Asp Ile Ser Tyr Arg Arg Ile Cys
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 Glu Lys Asn Ala Lys
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<210> 111
 <211> 3898
 <212> DNA
 <213> Homo sapiens

<220>

<221> misc_feature
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 <223> n = A,T,C or G

<400> 111

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<210> 112
<211> 405
<212> DNA
<213> Homo sapiens

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<400> 112
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aacaactctg tgttcaatgg caagtacgtg aacatgccac agtttcctgg ggatcttggg 360
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<210> 113
<211> 135
<212> PRT
<213> Homo sapiens

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<400> 113
Met Asn Trp His Met Ile Ile Ser Gly Leu Ile Val Val Val Leu Lys
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Val Val Gly Met Thr Leu Phe Leu Leu Tyr Phe Cys Pro Lys Asp Trp
20      25      30
Glu Phe Tyr Gln Ala Arg Cys Phe Phe Leu Ser Thr Ser Glu Ser Ser
35      40      45
Trp Asn Glu Ser Arg Asp Phe Cys Lys Gly Lys Gly Ser Thr Leu Ala
50      55      60
Ile Val Asn Thr Pro Glu Lys Leu Lys Phe Leu Gln Asp Ile Thr Asp
65      70      75      80
Ala Glu Lys Tyr Phe Ile Gly Leu Ile Tyr His Arg Glu Glu Lys Arg
85      90      95
Trp Arg Trp Ile Asn Asn Ser Val Phe Asn Gly Lys Tyr Val Asn Met
100     105     110
Pro Gln Phe Pro Gly Asp Leu Gly Leu Leu Gln Lys Thr Lys Pro Glu
115     120     125
Ile Ala Gly Phe Thr Leu Glu
130     135

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<210> 114
<211> 22
<212> PRT
<213> Homo sapiens

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<400> 114
Ile Ser Gly Leu Ile Val Val Val Leu Lys Val Val Gly Met Thr Leu
1      5      10      15
Phe Leu Leu Tyr Phe Cys
20

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<210> 115
 <211> 107
 <212> PRT
 <213> Homo sapiens

<400> 115
 Pro Lys Asp Trp Glu Phe Tyr Gln Ala Arg Cys Phe Phe Leu Ser Thr
 1 5 10 15
 Ser Glu Ser Ser Trp Asn Glu Ser Arg Asp Phe Cys Lys Gly Lys Gly
 20 25 30
 Ser Thr Leu Ala Ile Val Asn Thr Pro Glu Lys Leu Lys Phe Leu Gln
 35 40 45
 Asp Ile Thr Asp Ala Glu Lys Tyr Phe Ile Gly Leu Ile Tyr His Arg
 50 55 60
 Glu Glu Lys Arg Trp Arg Trp Ile Asn Asn Ser Val Phe Asn Gly Lys
 65 70 75 80
 Tyr Val Asn Met Pro Gln Phe Pro Gly Asp Leu Gly Leu Leu Gln Lys
 85 90 95
 Thr Lys Pro Glu Ile Ala Gly Phe Thr Leu Glu
 100 105

<210> 116

<220>
 <223> Unknown

<400> 116
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<210> 117

<220>
 <223> Unknown

<400> 117
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<210> 118

<220>
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<400> 118
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<210> 119

<220>
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<400> 119
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<210> 120
 <220>
 <223> Unknown

<400> 120
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<210> 121
 <211> 1909
 <212> DNA
 <213> Homo sapiens

<400> 121
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 gtggatgaat tgcgtgaggc aggctaacat caggatgcag tgcaaatct atgattccct 180
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<210> 122
 <211> 645
 <212> DNA
 <213> Homo sapiens

<400> 122
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 tggatgaatt gcgtgaggca ggctaacatc aggatgcagt gcaaaatcta tgattccctg 180
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<210> 123
<211> 215
<212> PRT
<213> Homo Sapiens

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<400> 123
Leu Phe Leu Gly Gly Val Gly Met Val Gly Thr Val Ala Val Thr Val
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Met Pro Gln Trp Arg Val Ser Ala Phe Ile Glu Asn Asn Ile Val Val
  20      25      30
Phe Glu Asn Phe Trp Glu Gly Leu Trp Met Asn Cys Val Arg Gln Ala
  35      40      45
Asn Ile Arg Met Gln Cys Lys Ile Tyr Asp Ser Leu Leu Ala Leu Ser
  50      55      60
Pro Asp Leu Gln Ala Ala Arg Gly Leu Met Cys Ala Ala Ser Val Met
  65      70      75      80
Ser Phe Leu Ala Phe Met Met Ala Ile Leu Gly Met Lys Cys Thr Arg
  85      90      95
Cys Thr Gly Asp Asn Glu Lys Val Lys Ala His Ile Leu Leu Thr Ala
  100     105     110
Gly Ile Ile Phe Ile Ile Thr Gly Met Val Val Leu Ile Pro Val Ser
  115     120     125
Trp Val Ala Asn Ala Ile Ile Arg Asp Phe Tyr Asn Ser Ile Val Asn
  130     135     140
Val Ala Gln Lys Arg Glu Leu Gly Glu Ala Leu Tyr Leu Gly Trp Thr
  145     150     155     160
Thr Ala Leu Val Leu Ile Val Gly Gly Ala Leu Phe Cys Cys Val Phe
  165     170     175
Cys Cys Asn Glu Lys Ser Ser Ser Tyr Arg Tyr Ser Ile Pro Ser His
  180     185     190
Arg Thr Thr Gln Lys Ser Tyr His Thr Gly Lys Lys Ser Pro Ser Val
  195     200     205
Tyr Ser Arg Ser Gln Tyr Val
  210     215

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<210> 124
<211> 24
<212> PRT
<213> Homo sapiens

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<400> 124
Leu Phe Leu Gly Gly Val Gly Met Val Gly Thr Val Ala Val Thr Val
  1      5      10      15
Met Pro Gln Trp Arg Val Ser Ala
  20

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<210> 125

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<211> 47
 <212> PRT
 <213> Homo sapiens

<400> 125
 Phe Ile Glu Asn Asn Ile Val Val Phe Glu Asn Phe Trp Glu Gly Leu
 1 5 10 15
 Trp Met Asn Cys Val Arg Gln Ala Asn Ile Arg Met Gln Cys Lys Ile
 20 25 30
 Tyr Asp Ser Leu Leu Ala Leu Ser Pro Asp Leu Gln Ala Ala Arg
 35 40 45

<210> 126
 <211> 21
 <212> PRT
 <213> Homo sapiens

<400> 126
 Gly Leu Met Cys Ala Ala Ser Val Met Ser Phe Leu Ala Phe Met Met
 1 5 10 15
 Ala Ile Leu Gly Met
 20

<210> 127
 <211> 15
 <212> PRT
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<400> 127
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<400> 128
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 Leu Ile Pro Val Ser Trp Val Ala
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 Lys Arg Glu Leu Gly Glu
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 Ala Leu Phe Cys Cys Val Phe Cys Cys
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<400> 131
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 Thr Gln Lys Ser Tyr His Thr Gly Lys Lys Ser Pro Ser Val Tyr Ser
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 Arg Ser Gln Tyr Val
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<400> 132
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 35 40 45
 Gly Leu Trp Met Asn Cys Met Arg His Ala Asn Ile Arg Met Gln Cys
 50 55 60
 Lys Val Tyr Asp Ser Leu Leu Ala Leu Ser Pro Asp Leu Gln Ala Ser
 65 70 75 80
 Arg Gly Leu Met Cys Ala Ala Ser Val Leu Ala Phe Leu Ala Phe Met
 85 90 95
 Thr Ala Ile Leu Gly Met Lys Cys Thr Arg Cys Thr Gly Asp Asp Glu
 100 105 110
 Asn Val Lys Ser Arg Ile Leu Leu Thr Ala Gly Ile Ile Phe Phe Ile
 115 120 125
 Thr Gly Leu Val Val Leu Ile Pro Val Ser Trp Val Ala Asn Ser Ile
 130 135 140
 Ile Arg Asp Phe Tyr Asn Pro Leu Val Asp Val Ala Leu Lys Arg Glu
 145 150 155 160
 Leu Gly Glu Ala Leu Tyr Ile Gly Trp Thr Thr Ala Leu Val Leu Ile
 165 170 175
 Ala Gly Gly Ala Leu Phe Cys Cys Val Phe Cys Cys Thr Glu Arg Ser

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<400> 133

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			20					25					30		
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		35					40					45			
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	50					55					60				
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65					70					75					80
Gly	Cys	Cys	Thr	Cys	Ala	Gly	Thr	Gly	Gly	Ala	Gly	Ala	Gly	Thr	Gly
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Thr	Cys	Thr	Gly	Cys	Cys	Thr	Thr	Cys	Ala	Thr	Cys	Gly	Ala	Ala	Ala
			100					105					110		
Gly	Thr	Ala	Ala	Cys	Ala	Thr	Thr	Gly	Thr	Gly	Gly	Thr	Gly	Thr	Thr
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	130					135					140				
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				165					170					175	
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			180					185					190		
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		195					200					205			
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	210					215					220				
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225					230					235					240
Cys	Gly	Ala	Gly	Gly	Ala	Cys	Thr	Gly	Ala	Thr	Gly	Thr	Gly	Thr	Gly
				245					250					255	
Cys	Thr	Gly	Cys	Gly	Thr	Cys	Cys	Gly	Thr	Cys	Thr	Thr	Gly	Gly	Cys
			260					265					270		
Thr	Thr	Thr	Cys	Thr	Thr	Gly	Gly	Cys	Thr	Thr	Thr	Cys	Ala	Thr	Gly
		275				280						285			
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305					310					315					320
Cys	Ala	Cys	Gly	Gly	Gly	Gly	Gly	Ala	Cys	Gly	Ala	Thr	Gly	Ala	Gly
				325				330						335	

Ala	Ala	Cys	Gly	Thr	Gly	Ala	Ala	Gly	Ala	Gly	Cys	Cys	Gly	Cys	Ala	
			340					345					350			
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		355					360					365				
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	370					375					380					
Ala	Cys	Cys	Gly	Gly	Cys	Thr	Thr	Gly	Gly	Thr	Thr	Gly	Thr	Gly	Cys	
385					390					395					400	
Thr	Cys	Ala	Thr	Cys	Cys	Cys	Thr	Gly	Thr	Cys	Ala	Gly	Cys	Thr	Gly	
			405					410						415		
Gly	Gly	Thr	Thr	Gly	Cys	Cys	Ala	Ala	Thr	Thr	Cys	Cys	Ala	Thr	Cys	
		420						425					430			
Ala	Thr	Cys	Ala	Gly	Ala	Gly	Ala	Cys	Thr	Thr	Cys	Thr	Ala	Cys	Ala	
	435					440						445				
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	450				455						460					
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465					470				475						480	
Cys	Thr	Gly	Gly	Gly	Ala	Gly	Ala	Ala	Gly	Cys	Cys	Cys	Thr	Cys	Thr	
			485					490						495		
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	515					520						525				
Gly	Cys	Thr	Gly	Gly	Ala	Gly	Gly	Ala	Gly	Cys	Ala	Cys	Thr	Gly	Thr	
	530					535					540					
Thr	Cys	Thr	Gly	Thr	Thr	Gly	Thr	Gly	Thr	Gly	Thr	Thr	Thr	Thr	Gly	
545					550				555						560	
Thr	Thr	Gly	Thr	Ala	Cys	Thr	Gly	Ala	Ala	Gly	Gly	Ala	Gly	Cys		
			565					570						575		
Ala	Ala	Cys	Ala	Gly	Thr	Thr	Ala	Cys	Ala	Gly	Gly	Thr	Ala	Cys	Thr	
		580					585						590			
Cys	Gly	Gly	Thr	Ala	Cys	Cys	Ala	Thr	Cys	Cys	Cys	Ala	Thr	Cys	Gly	
	595					600						605				
Cys	Ala	Cys	Cys	Ala	Cys	Thr	Cys	Ala	Ala	Cys	Gly	Gly	Ala	Gly	Thr	
	610					615					620					
Thr	Thr	Cys	Cys	Ala	Cys	Gly	Cys	Cys	Gly	Ala	Ala	Ala	Ala	Gly	Ala	
625					630				635						640	
Gly	Ala	Thr	Cys	Thr	Cys	Cys	Gly	Ala	Gly	Cys	Ala	Thr	Ala	Thr	Ala	
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 <213> Homo sapiens

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 Gly Ala Thr Thr Gly Thr Thr Cys Thr Ala Gly Ala Ala Ala Gly Thr

		35				40				45					
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Thr	Cys	Thr	Ala	Cys	Thr	Cys	Thr	Thr	Thr	Thr	Thr	Ala	Thr	Cys	Ala
				85					90					95	
Thr	Thr	Thr	Ala	Cys	Thr	Thr	Cys	Ala	Ala	Ala	Ala	Thr	Gly	Ala	Cys
			100					105					110		
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		115					120					125			
Thr	Thr	Ala	Thr	Thr	Thr	Thr	Ala	Cys	Thr	Ala	Cys	Thr	Gly	Thr	Ala
	130					135					140				
Ala	Thr	Thr	Thr	Cys	Thr	Cys	Cys	Ala	Cys	Gly	Ala	Cys	Ala	Thr	Ala
145					150					155					160
Gly	Cys	Ala	Thr	Thr	Ala	Thr	Gly	Thr	Ala	Cys	Ala	Thr	Ala	Gly	Ala
				165					170					175	
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			180					185					190		
Ala	Thr	Cys	Thr	Cys	Ala	Cys	Ala	Thr	Ala	Gly	Ala	Gly	Ala	Cys	Ala
		195					200					205			
Thr	Gly	Cys	Thr	Thr	Ala	Thr	Ala	Thr	Gly	Gly	Thr	Thr	Thr	Thr	Ala
	210					215					220				
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225					230					235					240
Ala	Gly	Thr	Cys	Cys	Ala	Thr	Thr	Ala	Cys	Ala	Cys	Thr	Gly	Ala	Ala
				245					250					255	
Thr	Ala	Ala	Ala	Thr	Ala	Gly	Ala	Ala	Cys	Thr	Cys	Ala	Ala	Cys	Thr
			260					265					270		
Ala	Thr	Thr	Gly	Cys	Thr	Thr	Thr	Thr	Cys	Ala	Gly	Gly	Gly	Ala	Ala
		275					280					285			
Ala	Thr	Cys	Ala	Thr	Gly	Gly	Ala	Thr	Ala	Gly	Gly	Gly	Thr	Thr	Gly
	290					295				300					
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Ala	Thr	Thr	Gly	Thr	Thr	Thr	Thr	Ala	Ala	Ala	Ala	Ala	Cys	Ala	Gly
				325					330					335	
Cys	Thr	Thr	Ala	Gly	Gly	Gly	Ala	Thr	Thr	Ala	Ala	Thr	Gly	Thr	Cys
			340					345					350		
Cys	Thr	Cys	Cys	Ala	Thr	Thr	Thr	Ala	Thr	Ala	Ala	Thr	Gly	Ala	Ala
		355					360					365			
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	370					375					380				
Thr	Thr	Ala	Ala	Thr	Cys	Ala	Gly	Cys	Ala	Thr	Thr	Gly	Thr	Ala	Ala
385					390					395					400
Ala	Gly	Gly	Ala	Ala	Ala	Thr	Thr	Gly	Ala	Ala	Thr	Gly	Gly	Cys	Thr
				405					410					415	
Thr	Thr	Cys	Thr	Gly	Ala	Thr	Ala	Thr	Gly	Cys	Thr	Gly	Thr	Thr	Thr
			420					425					430		
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		435					440					445			
Gly	Ala	Ala	Ala	Thr	Cys	Cys	Thr	Ala	Ala	Cys	Thr	Thr	Cys	Thr	Thr
	450					455					460				
Thr	Ala	Thr	Cys	Cys	Thr	Cys	Thr	Thr	Cys	Thr	Cys	Cys	Cys	Ala	Gly
465					470					475					480
Ala	Gly	Gly	Cys	Thr	Thr	Thr	Thr	Thr	Thr	Thr	Thr	Thr	Cys	Thr	Thr

Thr	Thr	Cys	Thr	Gly	Thr	Thr	Thr	Ala	Thr	Thr	Cys	Cys	Ala	Ala	Ala	
945					950					955						960
Thr	Thr	Thr	Gly	Ala	Thr	Gly	Ala	Ala	Ala	Cys	Thr	Gly	Ala	Cys	Ala	
				965						970						975
Ala	Thr	Cys	Cys	Ala	Ala	Thr	Thr	Thr	Gly	Ala	Ala	Ala	Gly	Thr	Thr	
			980					985					990			
Thr	Gly	Thr	Gly	Thr	Cys	Gly	Ala	Cys	Gly	Thr	Cys	Thr	Gly	Thr	Cys	
		995				1000						1005				
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	1010					1015					1020					
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1025					1030					1035						1040
Ala	Cys	Ala	Thr	Thr	Ala	Thr	Ala	Thr	Thr	Ala	Ala	Thr	Ala	Ala		
				1045					1050							1055
Ala	Thr	Thr	Gly	Thr	Ala	Cys	Ala	Thr	Thr	Thr	Thr	Thr	Cys	Cys	Ala	
			1060					1065					1070			
Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	
			1075					1080					1085			
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 <212> PRT
 <213> Homo sapiens

<400> 135																
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			20					25					30			
Thr	Ala	Phe	Ile	Gly	Ser	Asn	Ile	Val	Thr	Ser	Gln	Thr	Ile	Trp	Glu	
		35				40						45				
Gly	Leu	Trp	Met	Asn	Cys	Val	Val	Gln	Ser	Thr	Gly	Gln	Met	Gln	Cys	
	50				55						60					
Lys	Val	Tyr	Asp	Ser	Leu	Leu	Ala	Leu	Pro	Gln	Asp	Leu	Gln	Ala	Ala	
65					70					75					80	
Arg	Ala	Leu	Val	Ile	Ile	Ser	Ile	Ile	Val	Ala	Ala	Leu	Gly	Val	Leu	
				85					90					95		
Leu	Ser	Val	Val	Gly	Gly	Lys	Cys	Thr	Asn	Cys	Leu	Glu	Asp	Glu	Ser	
			100					105					110			
Ala	Lys	Ala	Lys	Thr	Met	Ile	Val	Ala	Gly	Val	Val	Phe	Leu	Leu	Ala	
		115					120					125				
Gly	Leu	Met	Val	Ile	Val	Pro	Val	Ser	Trp	Thr	Ala	His	Asn	Ile	Ile	
	130					135					140					
Gln	Asp	Phe	Tyr	Asn	Pro	Leu	Val	Ala	Ser	Gly	Gln	Lys	Arg	Glu	Met	
145					150					155					160	
Gly	Ala	Ser	Leu	Tyr	Val	Gly	Trp	Ala	Ala	Ser	Gly	Leu	Leu	Leu	Leu	
				165				170						175		
Gly	Gly	Gly	Leu	Leu	Cys	Cys	Asn	Cys	Pro	Pro	Arg	Thr	Asp	Lys	Pro	
			180				185						190			
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<210> 136
 <211> 210
 <212> PRT
 <213> Mus sp.

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 Thr Ala Phe Ile Gly Ser Asn Ile Val Thr Ala Gln Thr Ser Trp Glu
 35 40 45
 Gly Leu Trp Met Asn Cys Val Val Gln Ser Thr Gly Gln Met Gln Cys
 50 55 60
 Lys Met Tyr Asp Ser Met Leu Ala Leu Pro Gln Asp Leu Gln Ala Ala
 65 70 75 80
 Arg Ala Leu Met Val Ile Ser Ile Ile Val Gly Ala Leu Gly Met Leu
 85 90 95
 Leu Ser Val Val Gly Gly Lys Cys Thr Asn Cys Met Glu Asp Glu Thr
 100 105 110
 Val Lys Ala Lys Ile Met Ile Thr Ala Gly Ala Val Phe Ile Val Ala
 115 120 125
 Ser Met Leu Ile Met Val Pro Val Ser Trp Thr Ala His Asn Val Ile
 130 135 140
 Arg Asp Phe Tyr Asn Pro Met Val Ala Ser Gly Gln Lys Arg Glu Met
 145 150 155 160
 Gly Ala Ser Leu Tyr Val Gly Trp Ala Ala Ser Gly Leu Leu Leu Leu
 165 170 175
 Gly Gly Gly Leu Leu Cys Cys Ser Cys Pro Pro Arg Ser Asn Asp Lys
 180 185 190
 Pro Tyr Ser Ala Lys Tyr Ser Ala Ala Arg Ser Val Pro Ala Ser Asn
 195 200 205
 Tyr Val
 210

<210> 137
 <211> 248
 <212> PRT
 <213> Rattus sp.

<400> 137
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 35 40 45
 Leu Trp Met Asn Cys Val Gln Ser Thr Gly Gln Met Gln Cys Lys Met
 50 55 60
 Tyr Asp Ser Leu Leu Ala Leu Pro Gln Asp Leu Gln Ala Ala Arg Ala
 65 70 75 80
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<210> 140

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<223> Unknown

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<210> 141

<211> 323

<212> DNA

<213> Homo sapiens

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gagaatctgt ggcctcccat ctccccaaag gctgtcgacg atgctgtgac cccgaggacc 240
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<210> 142

<211> 240

<212> DNA

<213> Homo sapiens

<400> 142
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cccaaaggct gtcgacgatg ctgtgacccc gaggacctga tgtcctctga tgatacggtc 180
caggccccctg tttcccctta tgtcctgcct gaagtcaggc cgtacctcgg ccgcgaccac 240

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<211> 80

<212> PRT

<213> Homo sapiens

<400> 143
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Asp Pro Glu Asp Leu Met Ser Ser Asp Asp Thr Val Gln Ala Pro Val
50 55 60
Ser Pro Tyr Val Leu Pro Glu Val Arg Pro Tyr Leu Gly Arg Asp His
65 70 75 80

<210> 144

<211> 24
<212> PRT
<213> Homo sapiens

<400> 144
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1 5 10 15
Phe Leu Leu Pro Leu Val Phe Gly
20

<210> 145
<211> 56
<212> PRT
<213> Homo sapiens

<400> 145
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Arg Pro Tyr Leu Gly Arg Asp His
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<210> 146
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<400> 146
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<210> 147
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<210> 151

<211> 546

<212> DNA

<213> Homo sapiens

<400> 151

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tggttcatt cttatcttta ctttttttaa tattaaggga cagaatacca agtgtccaat 180
gtcttggtat tatattgtta ggggtactggg cactttgggg atattgactg tattctgggt 240
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tactcttctt cttggaattc tttttcttat tggttattat gggagttttc acccaaacag 360
aagtgcagaa acaaaatgtg atgaaattga tggaaaacca gttctaagag aatgtagaat 420
gagatatttc ctaatggaat aagctattca tttatgatat atattttctt atattttgtt 480
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<210> 152

<211> 345

<212> DNA

<213> Homo sapiens

<400> 152

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atacctatca gtataactat agttcttact cttcttcttg gaattctttt tcttattgtt 240
tattatggga gttttcaccc aaacagaagt gcagaaacaa aatgtgatga aattgatgga 300
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<210> 153

<211> 115

<212> PRT

<213> Homo sapiens

<400> 153

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Phe Phe Asn Ile Lys Gly Gln Asn Thr Lys Cys Pro Met Ser Cys Tyr
          20          25          30

Tyr Ile Val Arg Val Leu Gly Thr Leu Gly Ile Leu Thr Val Phe Trp
          35          40          45
Val Cys Pro Leu Thr Ile Phe Asn Pro Asp Tyr Phe Ile Pro Ile Ser
          50          55          60
Ile Thr Ile Val Leu Thr Leu Leu Gly Ile Leu Phe Leu Ile Val
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65					70					75					80
Tyr	Tyr	Gly	Ser	Phe	His	Pro	Asn	Arg	Ser	Ala	Glu	Thr	Lys	Cys	Asp
				85					90					95	
Glu	Ile	Asp	Gly	Lys	Pro	Val	Leu	Arg	Glu	Cys	Arg	Met	Arg	Tyr	Phe
			100					105						110	
Leu	Met	Glu													
		115													

<210> 154
 <211> 22
 <212> PRT
 <213> Homo sapiens

<400> 154															
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Phe	Phe	Asn	Ile	Lys	Gly										
			20												

<210> 155
 <211> 93
 <212> PRT
 <213> Homo sapiens

<400> 155															
Gln	Asn	Thr	Lys	Cys	Pro	Met	Ser	Cys	Tyr	Tyr	Ile	Val	Arg	Val	Leu
1				5					10					15	
Gly	Thr	Leu	Gly	Ile	Leu	Thr	Val	Phe	Trp	Val	Cys	Pro	Leu	Thr	Ile
			20					25					30		
Phe	Asn	Pro	Asp	Tyr	Phe	Ile	Pro	Ile	Ser	Ile	Thr	Ile	Val	Leu	Thr
		35					40				45				
Leu	Leu	Leu	Gly	Ile	Leu	Phe	Leu	Ile	Val	Tyr	Tyr	Gly	Ser	Phe	His
	50				55					60					
Pro	Asn	Arg	Ser	Ala	Glu	Thr	Lys	Cys	Asp	Glu	Ile	Asp	Gly	Lys	Pro
65					70				75					80	
Val	Leu	Arg	Glu	Cys	Arg	Met	Arg	Tyr	Phe	Leu	Met	Glu			
			85						90						

<210> 156
 <211> 9
 <212> PRT
 <213> Homo sapiens

<400> 156								
Gln	Asn	Thr	Lys	Cys	Pro	Met	Ser	Cys
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<210> 157
 <211> 18
 <212> PRT
 <213> Homo sapiens

<400> 157

Tyr Tyr Ile Val Arg Val Leu Gly Thr Leu Gly Ile Leu Thr Val Phe
 1 5 10 15
 Trp Val

<210> 158
 <211> 9
 <212> PRT
 <213> Homo sapiens

<400> 158
 Cys Pro Leu Thr Ile Phe Asn Pro Asp
 1 5

<210> 159
 <211> 24
 <212> PRT
 <213> Homo sapiens

<400> 159
 Tyr Phe Ile Pro Ile Ser Ile Thr Ile Val Leu Thr Leu Leu Leu Gly
 1 5 10 15
 Ile Leu Phe Leu Ile Val Tyr Tyr
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<210> 160
 <211> 33
 <212> PRT
 <213> Homo sapiens

<400> 160
 Gly Ser Phe His Pro Asn Arg Ser Ala Glu Thr Lys Cys Asp Glu Ile
 1 5 10 15
 Asp Gly Lys Pro Val Leu Arg Glu Cys Arg Met Arg Tyr Phe Leu Met
 20 25 30
 Glu

<210> 161
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 <223> Unknown

<400> 161
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<210> 162

<220>
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<400> 162
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<210> 163
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<210> 170

<220>

<223> Unknown

<400> 170

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<210> 171

<211> 1684

<212> DNA

<213> Homo sapiens

<400> 171

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atgaagaaaa tatgcaactg gctcaggcat atctcaacca gttctactct cttgaaatag 180
aagggaatca tcttggtcaa agcaagaata ggagtctcat agatgacaaa attcgggaaa 240
tgcaagcatt ttttggattg acagtgactg gaaaactgga ctcaaacacc cttgagatca 300
tgaagacacc caggtgtggg gtgctgatg tgggccagta tggctacacc ctccctgggt 360
ggagaaaata caacctcacc tacagaataa taaactatac tccggatatg gcacgagctg 420
ctgtggatga ggctatccaa gaaggtttag aagtgtggag caaagtcact cactaaaaat 480
tcaccaagat ttcaaagggg attgcagaca tcatgattgc ctttaggact cgagtccatg 540
gtcgggtgcc tcgctatttt gatggctcct tgggagtgtt tggccatgcc tttcctcctg 600
gtccgggtct ggggtgtgac actcattttg atgaggatga aaactggacc aaggatggag 660
caggattcaa cttgtttctt gtggctgtc atgaatttgg tcatgactg gggctctctc 720
actccaatga tcaaacagcc ttgatgttcc caaattatgt ctccctggat cccagaaaat 780
accactttt tcaggatgat atcaatggaa tccagtccat ctatggaggt ctgcctaagg 840
tacctgctaa gccaaaggaa cccactatac cccatgcctg tgaccctgac ttgacttttg 900
acgctatcac aactttccgc agagaagtaa tgttctttta aggcaggcac ctatggagga 960
tctattatga tatcacggat gttgagtttg aattaattgc ttcattctgg ccatctctgc 1020
cagctgatct gcaagctgca tacgagaacc ccagagataa gattctggtt tttaaagatg 1080
aaaacttctg gatgatcaga ggatagtctg tcttgccaga ttatcccaa tccatccata 1140
cattaggttt tccaggacgt gtgaagaaaa tagatgcagc cgtctgtgat aagaccacaa 1200
gaaaaaccta cttctttgtg ggcatttggt gctggaggtt tgatgaaatg acccaaacca 1260
tggaacaaagg attcccgcag agagtggtaa aacactttcc tggaatcagt atccgtgttg 1320
atgctgcttt ccagtacaaa ggattcttct ttttcagccg tggatcaaaag caatttgaat 1380
acaacattaa gacaaagaat attaccgaa tcatgagAAC taatacttgg tttcaatgca 1440
aagaacaaaa gaactcctca tttggttttg atatcaacaa ggaaaaagca cattcaggag 1500
gcataaagat attgtatcat aagagttaa gcttgtttat ttttggtatt gttcatttgc 1560
tgaaaaacac ttctatttat caataaattc atagacctaa aataaacctc aacaggtctt 1620
ttaatataaa ttctgcttca aaatagaata aaaccattct ttaacaacaa aaaaaaaaaa 1680
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<210> 172

<211> 1542

<212> DNA

<213> Homo sapiens

<400> 172

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gtccggatga cggaaaatga agaaaatatg caactggctc aggcatact caaccagttc 120
tactctcttg aaatagaagg gaatcatctt gttcaaagca agaataagg tctcatagat 180
gacaaaattc gggaaatgca agcatttttt ggattgacag tgactggaaa actggactca 240
aacacccttg agatcatgaa gacaccagg tgtgggggtg ctgatgtggg ccagtatggc 300
tacaccctcc ctgggtggag aaaatacaac ctcacctaca gaataataaa ctatactccg 360
gatatggcac gagctgctgt ggatgaggct atccaagaag gtttagaagt gtggagcaaa 420
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gtcactccac taaaattcac caagatttca aaggggattg cagacatcat gattgccttt 480
aggactcgag tccatggctg gtgtcctcgc tattttgatg gtcccttggg agtgcttggc 540
catgcctttc ctcttggtcc gggctctgggt ggtgacactc attttgatga ggatgaaaac 600
tggaccaagg atggagcagg attcaacttg tttcttggg ctgctcatga atttggtcac 660
gcaactggggc tctctcactc caatgatcaa acagccttga tgttcccaaa ttatgtctcc 720
ctggatccca gaaaataccc acttttctcag gatgatata atggaatcca gtccatctat 780
ggaggtctgc ctaaggtacc tgctaagcca aaggaaccca ctatacccca tgctgtgac 840
cctgacttga cttttgacgc tatcacaact ttccgcagag aagtaatgtt ctttaaaggc 900
aggcacctat ggaggatcta ttatgatata acggatgttg agtttgaatt aattgcttca 960
ttctggccat ctctgccagc tgatctgcaa gctgcatacg agaaccocag agataagatt 1020
ctggttttta aagatgaaaa cttctggatg atcagaggat atgctgtctt gccagattat 1080
cccaaatacca tccatacatt aggtttttcca ggacgtgtga agaaaataga tgcagccgctc 1140
tgtgataaga ccacaagaaa aacctacttc tttgtgggca tttgggtgctg gaggtttgat 1200
gaaatgacct aaaccatgga caaaggattc ccgcagagag tggtaaaaca ctttcctgga 1260
atcagtatcc gtgttgatgc tgctttccag taaaaggat tcttcttttt cagccgtgga 1320
tcaaagcaat ttgaatacaa cattaagaca aagaatatta cccgaatcat gagaactaat 1380
acttggtttc aatgcaaaga accaaagaac tcctcatttg gttttgatat caacaaggaa 1440
aaagcacatt caggaggcat aaagatatgt tatcataaga gtttaagctt gtttattttt 1500
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<210> 173

<211> 513

<212> PRT

<213> Homo sapiens

<400> 173

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Met Lys Arg Leu Leu Leu Phe Leu Phe Phe Ile Thr Phe Ser Ser
 1          5          10          15
Ala Phe Pro Leu Val Arg Met Thr Glu Asn Glu Glu Asn Met Gln Leu
 20          25          30
Ala Gln Ala Tyr Leu Asn Gln Phe Tyr Ser Leu Glu Ile Glu Gly Asn
 35          40          45
His Leu Val Gln Ser Lys Asn Arg Ser Leu Ile Asp Asp Lys Ile Arg
 50          55          60
Glu Met Gln Ala Phe Phe Gly Leu Thr Val Thr Gly Lys Leu Asp Ser
 65          70          75          80
Asn Thr Leu Glu Ile Met Lys Thr Pro Arg Cys Gly Val Pro Asp Val
 85          90          95
Gly Gln Tyr Gly Tyr Thr Leu Pro Gly Trp Arg Lys Tyr Asn Leu Thr
100          105          110
Tyr Arg Ile Ile Asn Tyr Thr Pro Asp Met Ala Arg Ala Ala Val Asp
115          120          125
Glu Ala Ile Gln Glu Gly Leu Glu Val Trp Ser Lys Val Thr Pro Leu
130          135          140
Lys Phe Thr Lys Ile Ser Lys Gly Ile Ala Asp Ile Met Ile Ala Phe
145          150          155          160
Arg Thr Arg Val His Gly Arg Cys Pro Arg Tyr Phe Asp Gly Pro Leu
165          170          175
Gly Val Leu Gly His Ala Phe Pro Pro Gly Pro Gly Leu Gly Gly Asp
180          185          190
Thr His Phe Asp Glu Asp Glu Asn Trp Thr Lys Asp Gly Ala Gly Phe
195          200          205
Asn Leu Phe Leu Val Ala Ala His Glu Phe Gly His Ala Leu Gly Leu
210          215          220
Ser His Ser Asn Asp Gln Thr Ala Leu Met Phe Pro Asn Tyr Val Ser
225          230          235          240
Leu Asp Pro Arg Lys Tyr Pro Leu Ser Gln Asp Asp Ile Asn Gly Ile

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Gln	Ala	Tyr	Leu	Asn	Gln	Phe	Tyr	Ser	Leu	Glu	Ile	Glu	Gly	Asn	His		
			20					25					30				
Leu	Val	Gln	Ser	Lys	Asn	Arg	Ser	Leu	Ile	Asp	Asp	Lys	Ile	Arg	Glu		
		35					40					45					
Met	Gln	Ala	Phe	Phe	Gly	Leu	Thr	Val	Thr	Gly	Lys	Leu	Asp	Ser	Asn		
	50					55					60						
Thr	Leu	Glu	Ile	Met	Lys	Thr	Pro	Arg	Cys	Gly	Val	Pro	Asp	Val	Gly		
65					70					75					80		
Gln	Tyr	Gly	Tyr	Thr	Leu	Pro	Gly	Trp	Arg	Lys	Tyr	Asn	Leu	Thr	Tyr		
				85				90						95			
Arg	Ile	Ile	Asn	Tyr	Thr	Pro	Asp	Met	Ala	Arg	Ala	Ala	Val	Asp	Glu		
			100					105					110				
Ala	Ile	Gln	Glu	Gly	Leu	Glu	Val	Trp	Ser	Lys	Val	Thr	Pro	Leu	Lys		
		115					120					125					
Phe	Thr	Lys	Ile	Ser	Lys	Gly	Ile	Ala	Asp	Ile	Met	Ile	Ala	Phe	Arg		
	130					135					140						
Thr	Arg	Val	His	Gly	Arg	Cys	Pro	Arg	Tyr	Phe	Asp	Gly	Pro	Leu	Gly		
145					150					155					160		
Val	Leu	Gly	His	Ala	Phe	Pro	Pro	Gly	Pro	Gly	Leu	Gly	Gly	Asp	Thr		
				165				170						175			
His	Phe	Asp	Glu	Asp	Glu	Asn	Trp	Thr	Lys	Asp	Gly	Ala	Gly	Phe	Asn		
		180						185					190				
Leu	Phe	Leu	Val	Ala	Ala	His	Glu	Phe	Gly	His	Ala	Leu	Gly	Leu	Ser		
		195					200					205					
His	Ser	Asn	Asp	Gln	Thr	Ala	Leu	Met	Phe	Pro	Asn	Tyr	Val	Ser	Leu		
	210					215					220						
Asp	Pro	Arg	Lys	Tyr	Pro	Leu	Ser	Gln	Asp	Asp	Ile	Asn	Gly	Ile	Gln		
225					230					235					240		
Ser	Ile	Tyr	Gly	Gly	Leu	Pro	Lys	Val	Pro	Ala	Lys	Pro	Lys	Glu	Pro		
				245				250						255			
Thr	Ile	Pro	His	Ala	Cys	Asp	Pro	Asp	Leu	Thr	Phe	Asp	Ala	Ile	Thr		
			260					265					270				
Thr	Phe	Arg	Arg	Glu	Val	Met	Phe	Phe	Lys	Gly	Arg	His	Leu	Trp	Arg		
		275					280					285					
Ile	Tyr	Tyr															
		290															

<210> 176
 <211> 467
 <212> PRT
 <213> Homo sapiens

<400> 176

Met	Phe	Ser	Leu	Lys	Thr	Leu	Pro	Phe	Leu	Leu	Leu	Leu	His	Val	Gln		
1				5					10					15			
Ile	Ser	Lys	Ala	Phe	Pro	Val	Ser	Ser	Lys	Glu	Lys	Asn	Thr	Lys	Thr		
			20					25					30				
Val	Gln	Asp	Tyr	Leu	Glu	Lys	Phe	Tyr	Gln	Leu	Pro	Ser	Asn	Gln	Tyr		
			35					40					45				
Gln	Ser	Thr	Arg	Lys	Asn	Gly	Thr	Asn	Val	Ile	Val	Glu	Lys	Leu	Lys		
	50					55					60						
Glu	Met	Gln	Arg	Phe	Phe	Gly	Leu	Asn	Val	Thr	Gly	Lys	Pro	Asn	Glu		
65					70					75					80		
Glu	Thr	Leu	Asp	Met	Met	Lys	Lys	Pro	Arg	Cys	Gly	Val	Pro	Asp	Ser		
				85					90					95			

Gly	Gly	Phe	Met	Leu	Thr	Pro	Gly	Asn	Pro	Lys	Trp	Glu	Arg	Thr	Asn		
			100					105					110				
Leu	Thr	Tyr	Arg	Ile	Arg	Asn	Tyr	Thr	Pro	Gln	Leu	Ser	Glu	Ala	Glu		
		115					120					125					
Val	Glu	Arg	Ala	Ile	Lys	Asp	Ala	Phe	Glu	Leu	Trp	Ser	Val	Ala	Ser		
	130					135					140						
Pro	Leu	Ile	Phe	Thr	Arg	Ile	Ser	Gln	Gly	Glu	Ala	Asp	Ile	Asn	Ile		
145					150					155					160		
Ala	Phe	Tyr	Gln	Arg	Asp	His	Gly	Asp	Asn	Ser	Pro	Phe	Asp	Gly	Pro		
			165					170						175			
Asn	Gly	Ile	Leu	Ala	His	Ala	Phe	Gln	Pro	Gly	Gln	Gly	Ile	Gly	Gly		
		180						185					190				
Asp	Ala	His	Phe	Asp	Ala	Glu	Glu	Thr	Trp	Thr	Asn	Thr	Ser	Ala	Asn		
	195					200						205					
Tyr	Asn	Leu	Phe	Leu	Val	Ala	Ala	His	Glu	Phe	Gly	His	Ser	Leu	Gly		
	210					215					220						
Leu	Ala	His	Ser	Ser	Asp	Pro	Gly	Ala	Leu	Met	Tyr	Pro	Asn	Tyr	Ala		
225					230					235					240		
Phe	Arg	Glu	Thr	Ser	Asn	Tyr	Ser	Leu	Pro	Gln	Asp	Asp	Ile	Asp	Gly		
			245					250						255			
Ile	Gln	Ala	Ile	Tyr	Gly	Leu	Ser	Ser	Asn	Pro	Ile	Gln	Pro	Thr	Gly		
		260						265					270				
Pro	Ser	Thr	Pro	Lys	Pro	Cys	Asp	Pro	Ser	Leu	Thr	Phe	Asp	Ala	Ile		
	275						280					285					
Thr	Thr	Leu	Arg	Gly	Glu	Ile	Leu	Phe	Phe	Lys	Asp	Arg	Tyr	Phe	Trp		
	290				295						300						
Arg	Arg	His	Pro	Gln	Leu	Gln	Arg	Val	Glu	Met	Asn	Phe	Ile	Ser	Leu		
305					310					315					320		
Phe	Trp	Pro	Ser	Leu	Pro	Thr	Gly	Ile	Gln	Ala	Ala	Tyr	Glu	Asp	Phe		
			325					330						335			
Asp	Arg	Asp	Leu	Ile	Phe	Leu	Phe	Lys	Gly	Asn	Gln	Tyr	Trp	Ala	Leu		
		340						345					350				
Ser	Gly	Tyr	Asp	Ile	Leu	Gln	Gly	Tyr	Pro	Lys	Asp	Ile	Ser	Asn	Tyr		
	355						360					365					
Gly	Phe	Pro	Ser	Ser	Val	Gln	Ala	Ile	Asp	Ala	Ala	Val	Phe	Tyr	Arg		
	370					375				380							
Ser	Lys	Thr	Tyr	Phe	Phe	Val	Asn	Asp	Gln	Phe	Trp	Arg	Tyr	Asp	Asn		
385					390					395					400		
Gln	Arg	Gln	Phe	Met	Glu	Pro	Gly	Tyr	Pro	Lys	Ser	Ile	Ser	Gly	Ala		
			405					410						415			
Phe	Pro	Gly	Ile	Glu	Ser	Lys	Val	Asp	Ala	Val	Phe	Gln	Gln	Glu	His		
		420						425					430				
Phe	Phe	His	Val	Phe	Ser	Gly	Pro	Arg	Tyr	Tyr	Ala	Phe	Asp	Leu	Ile		
	435					440					445						
Ala	Gln	Arg	Val	Thr	Arg	Val	Ala	Arg	Gly	Asn	Lys	Trp	Leu	Asn	Cys		
	450					455					460						
Arg	Tyr	Gly															
465																	

<210> 177
 <211> 1401
 <212> PRT
 <213> Homo sapiens

<400> 177
 Ala Thr Gly Thr Thr Cys Thr Cys Cys Cys Thr Gly Ala Ala Gly Ala

1				5					10				15			
Cys	Gly	Cys	Thr	Thr	Cys	Cys	Ala	Thr	Thr	Thr	Cys	Thr	Gly	Cys	Thr	
			20					25					30			
Cys	Thr	Thr	Ala	Cys	Thr	Cys	Cys	Ala	Thr	Gly	Thr	Gly	Cys	Ala	Gly	
		35					40					45				
Ala	Thr	Thr	Thr	Cys	Cys	Ala	Ala	Gly	Gly	Cys	Cys	Thr	Thr	Thr	Cys	
	50					55					60					
Cys	Thr	Gly	Thr	Ala	Thr	Cys	Thr	Thr	Cys	Thr	Ala	Ala	Ala	Gly	Ala	
65				70					75						80	
Gly	Ala	Ala	Ala	Ala	Ala	Thr	Ala	Cys	Ala	Ala	Ala	Ala	Ala	Cys	Thr	
				85				90						95		
Gly	Thr	Thr	Cys	Ala	Gly	Gly	Ala	Cys	Thr	Ala	Cys	Cys	Thr	Gly	Gly	
			100					105					110			
Ala	Ala	Ala	Ala	Gly	Thr	Thr	Cys	Thr	Ala	Cys	Cys	Ala	Ala	Thr	Thr	
		115					120					125				
Ala	Cys	Cys	Ala	Ala	Gly	Cys	Ala	Ala	Cys	Cys	Ala	Gly	Thr	Ala	Thr	
	130					135					140					
Cys	Ala	Gly	Thr	Cys	Thr	Ala	Cys	Ala	Ala	Gly	Gly	Ala	Ala	Gly	Ala	
145				150					155						160	
Ala	Thr	Gly	Gly	Cys	Ala	Cys	Thr	Ala	Ala	Thr	Gly	Thr	Gly	Ala	Thr	
				165				170						175		
Cys	Gly	Thr	Thr	Gly	Ala	Ala	Ala	Ala	Gly	Cys	Thr	Thr	Ala	Ala	Ala	
			180					185					190			
Gly	Ala	Ala	Ala	Thr	Gly	Cys	Ala	Gly	Cys	Gly	Ala	Thr	Thr	Thr	Thr	
	195						200					205				
Thr	Thr	Gly	Gly	Gly	Thr	Thr	Gly	Ala	Ala	Thr	Gly	Thr	Gly	Ala	Cys	
	210					215					220					
Gly	Gly	Gly	Gly	Ala	Ala	Gly	Cys	Cys	Ala	Ala	Ala	Thr	Gly	Ala	Gly	
225				230					235						240	
Gly	Ala	Ala	Ala	Cys	Thr	Cys	Thr	Gly	Gly	Ala	Cys	Ala	Thr	Gly	Ala	
				245				250						255		
Thr	Gly	Ala	Ala	Ala	Ala	Ala	Gly	Cys	Cys	Thr	Cys	Gly	Cys	Thr	Gly	
		260					265					270				
Thr	Gly	Gly	Ala	Gly	Thr	Gly	Cys	Cys	Thr	Gly	Ala	Cys	Ala	Gly	Thr	
	275						280					285				
Gly	Gly	Thr	Gly	Gly	Thr	Thr	Thr	Thr	Ala	Thr	Gly	Thr	Thr	Ala	Ala	
	290					295					300					
Cys	Cys	Cys	Cys	Ala	Gly	Gly	Ala	Ala	Ala	Cys	Cys	Cys	Cys	Ala	Ala	
305				310						315					320	
Gly	Thr	Gly	Gly	Gly	Ala	Ala	Cys	Gly	Cys	Ala	Cys	Thr	Ala	Ala	Cys	
				325				330						335		
Thr	Thr	Gly	Ala	Cys	Cys	Thr	Ala	Cys	Ala	Gly	Gly	Ala	Thr	Thr	Cys	
		340					345					350				
Gly	Ala	Ala	Ala	Cys	Thr	Ala	Thr	Ala	Cys	Cys	Cys	Cys	Ala	Cys	Ala	
	355						360					365				
Gly	Cys	Thr	Gly	Thr	Cys	Ala	Gly	Ala	Gly	Gly	Cys	Thr	Gly	Ala	Gly	
	370					375					380					
Gly	Thr	Ala	Gly	Ala	Ala	Ala	Gly	Ala	Gly	Cys	Thr	Ala	Thr	Cys	Ala	
385				390						395					400	
Ala	Gly	Gly	Ala	Thr	Gly	Cys	Cys	Thr	Thr	Thr	Gly	Ala	Ala	Cys	Thr	
				405				410						415		
Cys	Thr	Gly	Gly	Ala	Gly	Thr	Gly	Thr	Thr	Gly	Cys	Ala	Thr	Cys	Ala	
			420					425					430			
Cys	Cys	Thr	Cys	Thr	Cys	Ala	Thr	Cys	Thr	Thr	Cys	Ala	Cys	Cys	Ala	
	435					440						445				
Gly	Gly	Ala	Thr	Cys	Thr	Cys	Ala	Cys	Ala	Gly	Gly	Gly	Ala	Gly	Ala	
	450					455					460					

Gly	Gly	Cys	Ala	Gly	Ala	Thr	Ala	Thr	Cys	Ala	Ala	Cys	Ala	Thr	Thr
465					470					475					480
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Cys	Cys	Ala	Ala	Gly	Gly	Thr	Ala	Thr	Thr	Gly	Gly	Ala	Gly	Gly	Ala
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Gly	Ala	Thr	Gly	Cys	Thr	Cys	Ala	Thr	Thr	Thr	Thr	Gly	Ala	Thr	Gly
			580					585					590		
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	690					695					700				
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Thr	Thr	Cys	Ala	Gly	Gly	Gly	Ala	Ala	Ala	Cys	Cys	Ala	Gly	Cys	Ala
				725					730						735
Ala	Cys	Thr	Ala	Cys	Thr	Cys	Ala	Cys	Thr	Cys	Cys	Cys	Thr	Cys	Ala
			740					745					750		
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	770					775					780				
Gly	Ala	Cys	Thr	Thr	Thr	Cys	Ala	Ala	Gly	Cys	Ala	Ala	Cys	Cys	Cys
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	850					855					860				
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Ala	Ala	Ala	Thr	Ala	Cys	Thr	Thr	Thr	Thr	Cys	Thr	Thr	Thr	Ala	Ala
				885					890						895
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			900					905					910		
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Thr	Ala	Cys	Ala	Ala	Ala	Gly	Ala	Gly	Thr	Cys	Gly	Ala	Ala	Ala	Thr	
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Gly	Ala	Ala	Thr	Thr	Thr	Thr	Ala	Thr	Thr	Thr	Cys	Thr	Cys	Thr	Ala	
945						950					955				960	
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Cys	Ala	Ala	Cys	Thr	Gly	Gly	Thr	Ala	Thr	Ala	Cys	Ala	Gly	Gly	Cys	
			980					985					990			
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Cys	Cys	Ala	Ala	Thr	Ala	Cys	Thr	Gly	Gly	Gly	Cys	Thr	Cys	Thr	Gly	
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Ala	Gly	Thr	Gly	Gly	Cys	Thr	Ala	Thr	Gly	Ala	Thr	Ala	Thr	Thr	Cys	
			1060					1065					1070			
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			1220					1225					1230			
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		1235					1240					1245				
Thr	Thr	Thr	Cys	Cys	Ala	Gly	Gly	Ala	Ala	Thr	Ala	Gly	Ala	Gly	Ala	
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<212> PRT
<213> Homo sapiens

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35 40 45
Met Gln Ala Phe Phe Gly Leu Thr Val Thr Gly Lys Leu Asp Ser Asn
50 55 60
Thr Leu Glu Ile Met Lys Thr Pro Arg Cys Gly Val Pro Asp Val Gly
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Gln Tyr Gly Tyr Thr Leu Pro Gly Trp Arg Lys Tyr Asn Leu Thr Tyr
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Arg Ile Ile Asn Tyr Thr Pro Asp Met Ala Arg Ala Ala Val Asp Glu
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Ala Ile Gln Glu Gly Leu Glu Val Trp Ser Lys Val Thr Pro Leu Lys
115 120 125
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Thr Arg Val His Gly Arg Cys Pro Arg Tyr Phe Asp Gly Pro Leu Gly
145 150 155 160
Val Leu Gly His Ala Phe Pro Pro Gly Pro Gly Leu Gly Gly Asp Thr
165 170 175
His Phe Asp Glu Asp Glu Asn Trp Thr Lys Asp Gly Ala Gly Phe Asn
180 185 190
Leu Phe Leu Val Ala Ala His Glu Phe Gly His Ala Leu Gly Leu Ser
195 200 205
His Ser Asn Asp Gln Thr Ala Leu Met Phe Pro Asn Tyr Val Ser Leu
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Asp Pro Arg Lys Tyr Pro Leu Ser Gln Asp Asp Ile Asn Gly Ile Gln
225 230 235 240
Ser Ile Tyr Gly Gly Leu Pro Lys Val Pro Ala Lys Pro Lys Glu Pro
245 250 255
Thr Ile Pro His Ala Cys Asp Pro Asp Leu Thr Phe Asp Ala Ile Thr
260 265 270
Thr Phe Arg Arg Glu Val Met Phe Phe Lys Gly Arg His Leu Trp Arg
275 280 285
Ile Tyr Tyr Asp Ile Thr Asp Val Glu Phe Glu Leu Ile Ala Ser Phe
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Trp Pro Ser Leu Pro Ala Asp Leu Gln Ala Ala Tyr Glu Asn Pro Arg
305 310 315 320
Asp Lys Ile Leu Val Phe Lys Asp Glu Asn Phe Trp Met Ile Arg Gly
325 330 335
Tyr Ala Val Leu Pro Asp Tyr Pro Lys Ser Ile His Thr Leu Gly Phe
340 345 350
Pro Gly Arg Val Lys Lys Ile Asp Ala Ala Val Cys Asp Lys Thr Thr

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gtgactggaa	aactggattc	agacacactt	gcgatcatga	aagtgccag	gtgtggggtta	300
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 <212> PRT
 <213> Mus sp.

<400> 183
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 Ala Gln Ala Tyr Leu Asn Gln Phe Tyr Ser Leu Glu Ile Glu Gly Ser
 35 40 45
 His Phe Val Gln Ser Lys Asn Arg Ser Leu Phe Asp Gly Lys Leu Arg
 50 55 60
 Glu Met Gln Ala Phe Phe Gly Leu Thr Val Thr Gly Lys Leu Asp Ser
 65 70 75 80
 Asp Thr Leu Ala Ile Met Lys Val Pro Arg Cys Gly Val Pro Asp Val
 85 90 95
 Gly Gln Tyr Gly Tyr Thr Leu Pro Gly Trp Arg Lys Tyr Ser Leu Thr
 100 105 110
 Tyr Arg Ile Met Asn Tyr Thr Pro Asp Met Thr Pro Ala Asp Val Asp
 115 120 125
 Glu Ala Ile Gln Lys Ala Leu Gln Val Trp Ser Lys Val Thr Pro Leu
 130 135 140
 Thr Phe Thr Arg Ile Ser Lys Gly Val Ala Asp Ile Met Ile Ala Phe
 145 150 155 160
 Arg Thr Gly Val His Gly Trp Cys Pro Arg His Phe Asp Gly Pro Leu
 165 170 175
 Gly Val Leu Gly His Ala Phe Pro Pro Gly Leu Gly Leu Gly Gly Asp
 180 185 190
 Thr His Phe Asp Glu Asp Glu Thr Trp Ile Ala Lys Asp Gly Glu Gly
 195 200 205
 Phe Asn Leu Phe Leu Val Ala Ala His Glu Phe Gly His Ser Leu Gly
 210 215 220
 Leu Ser His Ser Asn Asp Gln Thr Ala Leu Met Phe Pro Asn Tyr Ile
 225 230 235 240
 Ser Leu Asp Pro Ser Lys Tyr Pro Leu Ser Gln Asp Asp Ile Asp Gly
 245 250 255
 Ile Gln Ser Ile Tyr Gly Ser Pro Pro Lys Val Thr Thr Lys Pro Ser
 260 265 270
 Gly Asn Ser Glu Pro His Ala Cys Asp Pro Thr Leu Thr Phe Asp Ala
 275 280 285
 Ile Thr Thr Phe Arg Arg Glu Val Met Phe Phe Lys Gly Arg His Leu
 290 295 300
 Trp Arg Val Tyr Ser Asp Ile Ala Gly Ala Glu Phe Glu Phe Ile Asp
 305 310 315 320
 Ser Phe Trp Pro Ser Leu Pro Ala Asp Leu Gln Ala Ala Tyr Glu Ser
 325 330 335
 Pro Arg Asp Glu Leu Leu Val Phe Lys Asp Glu Asn Phe Trp Val Ile
 340 345 350

Arg	Gly	Tyr	Ser	Val	Leu	Pro	Gly	Tyr	Pro	Lys	Ser	Ile	His	Thr	Leu
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Gly	Phe	Pro	Arg	Arg	Val	Lys	Lys	Ile	Asp	Ala	Ala	Val	Cys	Asp	His
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Asp	Thr	Arg	Lys	Thr	Phe	Phe	Phe	Val	Gly	Ile	Trp	Cys	Trp	Arg	Tyr
385					390				395						400
Asp	Glu	Met	Ala	Gln	Ala	Met	Asp	Arg	Gly	Phe	Pro	Gln	Arg	Ile	Ile
			405						410					415	
Lys	Cys	Phe	Pro	Gly	Ile	Arg	Leu	Arg	Val	Asp	Ala	Val	Phe	Gln	His
			420					425					430		
Asn	Gly	Phe	Leu	Tyr	Phe	Phe	His	Gly	Ser	Arg	Gln	Phe	Glu	Tyr	Asp
	435						440					445			
Met	Lys	Ala	Lys	Asn	Ile	Thr	Gln	Val	Ile	Lys	Thr	Asn	Ser	Trp	Phe
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Leu	Cys	Asn	Glu	Pro	Leu	Asn	Ala	Ser	Phe	Asn	Val	Ser	Val	Lys	Gly
465					470					475					480
Lys	Ala	Asn	Ser	Ile	Gly	Thr	Val	Ile	Leu	His	His	Lys	Arg	Leu	Ser
			485						490					495	
Leu	Leu	Thr	Phe	Ser	Ile	Val	His	Val	Leu	Thr	Lys	Thr	Tyr	Asn	
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 <212> PRT
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 <211> 494
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 Phe Val Gln Ser Lys Asn Arg Ser Leu Phe Asp Gly Lys Leu Arg Glu
 35 40 45
 Met Gln Ala Phe Phe Gly Leu Thr Val Thr Gly Lys Leu Asp Ser Asp
 50 55 60
 Thr Leu Ala Ile Met Lys Val Pro Arg Cys Gly Val Pro Asp Val Gly
 65 70 75 80
 Gln Tyr Gly Tyr Thr Leu Pro Gly Trp Arg Lys Tyr Ser Leu Thr Tyr
 85 90 95
 Arg Ile Met Asn Tyr Thr Pro Asp Met Thr Pro Ala Asp Val Asp Glu
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 Ala Ile Gln Lys Ala Leu Gln Val Trp Ser Lys Val Thr Pro Leu Thr
 115 120 125
 Phe Thr Arg Ile Ser Lys Gly Val Ala Asp Ile Met Ile Ala Phe Arg

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Val Leu Gly His Ala Phe Pro Pro Gly Leu Gly Leu Gly Gly Asp Thr		160
	165	170
His Phe Asp Glu Asp Glu Thr Trp Ile Ala Lys Asp Gly Glu Gly Phe		175
	180	185
Asn Leu Phe Leu Val Ala Ala His Glu Phe Gly His Ser Leu Gly Leu		190
	195	200
Ser His Ser Asn Asp Gln Thr Ala Leu Met Phe Pro Asn Tyr Ile Ser		205
	210	215
Leu Asp Pro Ser Lys Tyr Pro Leu Ser Gln Asp Asp Ile Asp Gly Ile		220
	225	230
Gln Ser Ile Tyr Gly Ser Pro Pro Lys Val Thr Thr Lys Pro Ser Gly		235
	245	250
Asn Ser Glu Pro His Ala Cys Asp Pro Thr Leu Thr Phe Asp Ala Ile		255
	260	265
Thr Thr Phe Arg Arg Glu Val Met Phe Phe Lys Gly Arg His Leu Trp		270
	275	280
Arg Val Tyr Ser Asp Ile Ala Gly Ala Glu Phe Glu Phe Ile Asp Ser		285
	290	295
Phe Trp Pro Ser Leu Pro Ala Asp Leu Gln Ala Ala Tyr Glu Ser Pro		300
	310	315
Arg Asp Glu Leu Leu Val Phe Lys Asp Glu Asn Phe Trp Val Ile Arg		320
	325	330
Gly Tyr Ser Val Leu Pro Gly Tyr Pro Lys Ser Ile His Thr Leu Gly		335
	340	345
Phe Pro Arg Arg Val Lys Lys Ile Asp Ala Ala Val Cys Asp His Asp		350
	355	360
Thr Arg Lys Thr Phe Phe Phe Val Gly Ile Trp Cys Trp Arg Tyr Asp		365
	370	375
Glu Met Ala Gln Ala Met Asp Arg Gly Phe Pro Gln Arg Ile Ile Lys		380
	385	390
Cys Phe Pro Gly Ile Arg Leu Arg Val Asp Ala Val Phe Gln His Asn		395
	405	410
Gly Phe Leu Tyr Phe Phe His Gly Ser Arg Gln Phe Glu Tyr Asp Met		415
	420	425
Lys Ala Lys Asn Ile Thr Gln Val Ile Lys Thr Asn Ser Trp Phe Leu		430
	435	440
Cys Asn Glu Pro Leu Asn Ala Ser Phe Asn Val Ser Val Lys Gly Lys		445
	450	455
Ala Asn Ser Ile Gly Thr Val Ile Leu His His Lys Arg Leu Ser Leu		460
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Leu Thr Phe Ser Ile Val His Val Leu Thr Lys Thr Tyr Asn		475
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<212> DNA
<213> Homo sapiens

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 35 40 45
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 50 55 60
 Pro Gly Tyr Thr Thr Leu Ala Gly Leu Asp Leu Ser His Asn Leu Leu
 65 70 75 80
 Thr Ser Ile Ser Pro Thr Ala Phe Ser Arg Leu Arg Tyr Leu Glu Ser
 85 90 95
 Leu Asp Leu Ser His Asn Gly Leu Thr Ala Leu Pro Ala Glu Ser Phe
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 Thr Ser Ser Pro Leu Ser Asp Val Asn Leu Ser His Asn Gln Leu Arg
 115 120 125
 Glu Val Ser Val Ser Ala Phe Thr Thr His Ser Gln Gly Arg Ala Leu
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 His Val Asp Leu Ser His Asn Leu Ile His Arg Leu Val Pro His Pro
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 Thr Arg Ala Gly Leu Pro Ala Pro Thr Ile Gln Ser Leu Asn Leu Ala
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 Trp Asn Arg Leu His Ala Val Pro Asn Leu Arg Asp Leu Pro Leu Arg
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 Tyr Leu Ser Leu Asp Gly Asn Pro Leu Ala Val Ile Gly Pro Gly Ala
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 Phe Ala Gly Leu Gly Gly Leu Thr His Leu Ser Leu Ala Ser Leu Gln
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 245 250 255
 Glu Val Phe Ser Gly Leu Ser Ser Leu Gln Glu Leu Asp Leu Ser Gly
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 <212> PRT
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Glu	Val	Ser	Val	Ser	Ala	Phe	Thr	Thr	His	Ser	Gln	Gly	Arg	Ala	Leu
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Trp	Asn	Arg	Leu	His	Ala	Val	Pro	Asn	Leu	Arg	Asp	Leu	Pro	Leu	Arg
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<212> PRT

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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			20					25					30		
Ala	Glu	Val	Phe	Ser	Gly	Leu	Ser	Ser	Leu	Gln	Glu	Leu	Asp	Leu	Ser
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Val	Arg	Glu	Gly	Thr	Tyr	Pro	Arg	Arg	Pro	Gly	Ser	Ser	Pro	Lys	Val
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Ile Gln Glu Asn Gly Ser Leu Ile Thr Ile Leu Val Ile Ala Gly Val
 65           70           75           80
Phe Trp Ile His Arg Leu Ile Lys Phe Ile Tyr Asn Ile Cys Cys Tyr
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Thr Gln Lys Glu His Gln Ile Cys Ile His Lys Arg Glu Leu Thr Glu
130          135          140
Leu Asp Ile Tyr His Arg Ile Leu Arg Phe Gln Asn Tyr Met Val Ala
145          150          155          160
Leu Val Asn Lys Ser Leu Leu Pro Leu Arg Phe Arg Leu Pro Gly Leu
165          170          175
Gly Glu Ala Val Phe Phe Thr Arg Gly Leu Lys Tyr Asn Phe Glu Leu
180          185          190
Ile Leu Phe Trp Gly Pro Gly Ser Leu Phe Leu Asn Glu Trp Ser Leu

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				645					650					655			
Lys	Gln	Gln	Ala	Gln	Ala	Glu	Pro	Glu	Arg	His	Val	Trp	His	Arg	Arg		
			660					665					670				
Glu	Ser	Asp	Glu	Ser	Gly	Glu	Ser	Ala	Pro	Asp	Glu	Gly	Gly	Glu	Gly		
		675					680					685					
Ala	Arg	Ala	Pro	Gln	Ser	Ile	Pro	Arg	Ser	Ala	Ser	Tyr	Pro	Cys	Ala		
	690					695					700						
Ala	Pro	Arg	Pro	Gly	Ala	Pro	Glu	Thr	Thr	Ala	Leu	His	Gly	Gly	Phe		
705				710						715					720		
Gln	Arg	Arg	Tyr	Gly	Gly	Ile	Thr	Asp	Pro	Gly	Thr	Val	Pro	Arg	Val		
			725					730					735				
Pro	Ser	His	Phe	Ser	Arg	Leu	Pro	Leu	Gly	Gly	Trp	Ala	Glu	Asp	Gly		
			740					745					750				
Gln	Ser	Ala	Ser	Arg	His	Pro	Glu	Pro	Val	Pro	Glu	Glu	Gly	Ser	Glu		
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	770					775											

<210> 204
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 <212> PRT
 <213> Homo sapiens

<400> 204
 Met Leu Ile Gly Glu Ile Phe Glu Leu Met Gln Phe Leu Phe Val Val
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 Ala Phe Thr Thr Phe Leu Val Ser Cys
 20 25

<210> 205
 <211> 753
 <212> PRT
 <213> Homo sapiens

<400> 205
 Val Asp Tyr Asp Ile Leu Phe Ala Asn Lys Met Val Asn His Ser Leu
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 His Pro Thr Glu Pro Val Lys Val Thr Leu Pro Asp Ala Phe Leu Pro
 20 25 30
 Ala Gln Val Cys Ser Ala Arg Ile Gln Glu Asn Gly Ser Leu Ile Thr
 35 40 45
 Ile Leu Val Ile Ala Gly Val Phe Trp Ile His Arg Leu Ile Lys Phe
 50 55 60
 Ile Tyr Asn Ile Cys Cys Tyr Trp Glu Ile His Ser Phe Tyr Leu His
 65 70 75 80
 Ala Leu Arg Ile Pro Met Ser Ala Leu Pro Tyr Cys Thr Trp Gln Glu
 85 90 95
 Val Gln Ala Arg Ile Val Gln Thr Gln Lys Glu His Gln Ile Cys Ile
 100 105 110
 His Lys Arg Glu Leu Thr Glu Leu Asp Ile Tyr His Arg Ile Leu Arg
 115 120 125
 Phe Gln Asn Tyr Met Val Ala Leu Val Asn Lys Ser Leu Leu Pro Leu
 130 135 140

Arg	Phe	Arg	Leu	Pro	Gly	Leu	Gly	Glu	Ala	Val	Phe	Phe	Thr	Arg	Gly
145					150					155					160
Leu	Lys	Tyr	Asn	Phe	Glu	Leu	Ile	Leu	Phe	Trp	Gly	Pro	Gly	Ser	Leu
				165					170						175
Phe	Leu	Asn	Glu	Trp	Ser	Leu	Lys	Ala	Glu	Tyr	Lys	Arg	Gly	Gly	Gln
			180					185					190		
Arg	Leu	Glu	Leu	Ala	Gln	Arg	Leu	Ser	Asn	Arg	Ile	Leu	Trp	Ile	Gly
		195					200					205			
Ile	Ala	Asn	Phe	Leu	Leu	Cys	Pro	Leu	Ile	Leu	Ile	Trp	Gln	Ile	Leu
	210					215					220				
Tyr	Ala	Phe	Phe	Ser	Tyr	Ala	Glu	Val	Leu	Lys	Arg	Glu	Pro	Gly	Ala
225					230					235					240
Leu	Gly	Ala	Arg	Cys	Trp	Ser	Leu	Tyr	Gly	Arg	Cys	Tyr	Leu	Arg	His
				245					250					255	
Phe	Asn	Glu	Leu	Glu	His	Glu	Leu	Gln	Ser	Arg	Leu	Asn	Arg	Gly	Tyr
			260					265					270		
Lys	Pro	Ala	Ser	Lys	Tyr	Met	Asn	Cys	Phe	Leu	Ser	Pro	Leu	Leu	Thr
		275					280					285			
Leu	Leu	Ala	Lys	Asn	Gly	Ala	Phe	Phe	Ala	Gly	Ser	Ile	Leu	Ala	Val
	290					295					300				
Leu	Ile	Ala	Leu	Thr	Ile	Tyr	Asp	Glu	Asp	Val	Leu	Ala	Val	Glu	His
305					310					315					320
Val	Leu	Thr	Thr	Val	Thr	Leu	Leu	Gly	Val	Thr	Val	Thr	Val	Cys	Arg
				325					330					335	
Ser	Phe	Ile	Pro	Asp	Gln	His	Met	Val	Phe	Cys	Pro	Glu	Gln	Leu	Leu
			340					345					350		
Arg	Val	Ile	Leu	Ala	His	Ile	His	Tyr	Met	Pro	Asp	His	Trp	Gln	Gly
		355					360					365			
Asn	Ala	His	Arg	Ser	Gln	Thr	Arg	Asp	Glu	Phe	Ala	Gln	Leu	Phe	Gln
	370					375					380				
Tyr	Lys	Ala	Val	Phe	Ile	Leu	Glu	Glu	Leu	Leu	Ser	Pro	Ile	Val	Thr
385					390					395					400
Pro	Leu	Ile	Leu	Ile	Phe	Cys	Leu	Arg	Pro	Arg	Ala	Leu	Glu	Ile	Ile
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Asp	Phe	Phe	Arg	Asn	Phe	Thr	Val	Glu	Val	Val	Gly	Val	Gly	Asp	Thr
				420					425					430	
Cys	Ser	Phe	Ala	Gln	Met	Asp	Val	Arg	Gln	His	Gly	His	Pro	Gln	Trp
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Leu	Ser	Ala	Gly	Gln	Thr	Glu	Ala	Ser	Val	Tyr	Gln	Gln	Ala	Glu	Asp
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Trp	Gln	Pro	Pro	Arg	Glu	Ser	Thr	Ala	Phe	Leu	Gly	Phe	Leu	Lys	Glu
				485					490					495	
Gln	Val	Gln	Arg	Asp	Gly	Ala	Ala	Ala	Ser	Leu	Ala	Gln	Gly	Gly	Leu
			500					505					510		
Leu	Pro	Glu	Asn	Ala	Leu	Phe	Thr	Ser	Ile	Gln	Ser	Leu	Gln	Ser	Glu
		515					520					525			
Ser	Glu	Pro	Leu	Ser	Leu	Ile	Ala	Asn	Val	Val	Ala	Gly	Ser	Ser	Cys
	530					535					540				
Arg	Gly	Pro	Pro	Leu	Pro	Arg	Asp	Leu	Gln	Gly	Ser	Arg	His	Arg	Ala
545					550					555					560
Glu	Val	Ala	Ser	Ala	Leu	Arg	Ser	Phe	Ser	Pro	Leu	Gln	Pro	Gly	Gln
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Ala	Pro	Thr	Gly	Arg	Ala	His	Ser	Thr	Met	Thr	Gly	Ser	Gly	Val	Asp
			580					585					590		

Ala Arg Thr Ala Ser Ser Gly Ser Ser Val Trp Glu Gly Gln Leu Gln
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 Ser Leu Val Leu Ser Glu Tyr Ala Ser Thr Glu Met Ser Leu His Ala
 610 615 620
 Leu Tyr Met His Gln Leu His Lys Gln Gln Ala Gln Ala Glu Pro Glu
 625 630 635 640
 Arg His Val Trp His Arg Arg Glu Ser Asp Glu Ser Gly Glu Ser Ala
 645 650 655
 Pro Asp Glu Gly Gly Glu Gly Ala Arg Ala Pro Gln Ser Ile Pro Arg
 660 665 670
 Ser Ala Ser Tyr Pro Cys Ala Ala Pro Arg Pro Gly Ala Pro Glu Thr
 675 680 685
 Thr Ala Leu His Gly Gly Phe Gln Arg Arg Tyr Gly Gly Ile Thr Asp
 690 695 700
 Pro Gly Thr Val Pro Arg Val Pro Ser His Phe Ser Arg Leu Pro Leu
 705 710 715 720
 Gly Gly Trp Ala Glu Asp Gly Gln Ser Ala Ser Arg His Pro Glu Pro
 725 730 735
 Val Pro Glu Glu Gly Ser Glu Asp Glu Leu Pro Pro Gln Val His Lys
 740 745 750
 Val

<210> 206
 <211> 45
 <212> PRT
 <213> Homo sapiens

<400> 206
 Val Asp Tyr Asp Ile Leu Phe Ala Asn Lys Met Val Asn His Ser Leu
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 His Pro Thr Glu Pro Val Lys Val Thr Leu Pro Asp Ala Phe Leu Pro
 20 25 30
 Ala Gln Val Cys Ser Ala Arg Ile Gln Glu Asn Gly Ser
 35 40 45

<210> 207
 <211> 17
 <212> PRT
 <213> Homo sapiens

<400> 207
 Leu Ile Thr Ile Leu Val Ile Ala Gly Val Phe Trp Ile His Arg Leu
 1 5 10 15
 Ile

<210> 208
 <211> 141
 <212> PRT
 <213> Homo sapiens

<400> 208
 Lys Phe Ile Tyr Asn Ile Cys Cys Tyr Trp Glu Ile His Ser Phe Tyr

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			20					25					30			
Gln	Glu	Val	Gln	Ala	Arg	Ile	Val	Gln	Thr	Gln	Lys	Glu	His	Gln	Ile	
		35					40					45				
Cys	Ile	His	Lys	Arg	Glu	Leu	Thr	Glu	Leu	Asp	Ile	Tyr	His	Arg	Ile	
	50					55					60					
Leu	Arg	Phe	Gln	Asn	Tyr	Met	Val	Ala	Leu	Val	Asn	Lys	Ser	Leu	Leu	
65					70					75					80	
Pro	Leu	Arg	Phe	Arg	Leu	Pro	Gly	Leu	Gly	Glu	Ala	Val	Phe	Phe	Thr	
			85					90						95		
Arg	Gly	Leu	Lys	Tyr	Asn	Phe	Glu	Leu	Ile	Leu	Phe	Trp	Gly	Pro	Gly	
		100					105						110			
Ser	Leu	Phe	Leu	Asn	Glu	Trp	Ser	Leu	Lys	Ala	Glu	Tyr	Lys	Arg	Gly	
	115					120					125					
Gly	Gln	Arg	Leu	Glu	Leu	Ala	Gln	Arg	Leu	Ser	Asn	Arg				
	130					135					140					

<210> 209
 <211> 25
 <212> PRT
 <213> Homo sapiens

<400> 209
 Ile Leu Trp Ile Gly Ile Ala Asn Phe Leu Leu Cys Pro Leu Ile Leu
 1 5 10 15
 Ile Trp Gln Ile Leu Tyr Ala Phe Phe
 20 25

<210> 210
 <211> 66
 <212> PRT
 <213> Homo sapiens

<400> 210
 Ser Tyr Ala Glu Val Leu Lys Arg Glu Pro Gly Ala Leu Gly Ala Arg
 1 5 10 15
 Cys Trp Ser Leu Tyr Gly Arg Cys Tyr Leu Arg His Phe Asn Glu Leu
 20 25 30
 Glu His Glu Leu Gln Ser Arg Leu Asn Arg Gly Tyr Lys Pro Ala Ser
 35 40 45
 Lys Tyr Met Asn Cys Phe Leu Ser Pro Leu Leu Thr Leu Leu Ala Lys
 50 55 60
 Asn Gly
 65

<210> 211
 <211> 17
 <212> PRT
 <213> Homo sapiens

<400> 211
 Ala Phe Phe Ala Gly Ser Ile Leu Ala Val Leu Ile Ala Leu Thr Ile
 1 5 10 15

Tyr

<210> 212
<211> 9
<212> PRT
<213> Homo sapiens

<400> 212
Asp Glu Asp Val Leu Ala Val Glu His
1 5

<210> 213
<211> 19
<212> PRT
<213> Homo sapiens

<400> 213
Val Leu Thr Thr Val Thr Leu Leu Gly Val Thr Val Thr Val Cys Arg
1 5 10 15
Ser Phe Ile

<210> 214
<211> 414
<212> PRT
<213> Homo sapiens

<400> 214
Pro Asp Gln His Met Val Phe Cys Pro Glu Gln Leu Leu Arg Val Ile
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Leu Ala His Ile His Tyr Met Pro Asp His Trp Gln Gly Asn Ala His
20 25 30
Arg Ser Gln Thr Arg Asp Glu Phe Ala Gln Leu Phe Gln Tyr Lys Ala
35 40 45
Val Phe Ile Leu Glu Glu Leu Leu Ser Pro Ile Val Thr Pro Leu Ile
50 55 60
Leu Ile Phe Cys Leu Arg Pro Arg Ala Leu Glu Ile Ile Asp Phe Phe
65 70 75 80
Arg Asn Phe Thr Val Glu Val Val Gly Val Gly Asp Thr Cys Ser Phe
85 90 95
Ala Gln Met Asp Val Arg Gln His Gly His Pro Gln Trp Leu Ser Ala
100 105 110
Gly Gln Thr Glu Ala Ser Val Tyr Gln Gln Ala Glu Asp Gly Lys Thr
115 120 125
Glu Leu Ser Leu Met His Phe Ala Ile Thr Asn Pro Gly Trp Gln Pro
130 135 140
Pro Arg Glu Ser Thr Ala Phe Leu Gly Phe Leu Lys Glu Gln Val Gln
145 150 155 160
Arg Asp Gly Ala Ala Ala Ser Leu Ala Gln Gly Gly Leu Leu Pro Glu
165 170 175
Asn Ala Leu Phe Thr Ser Ile Gln Ser Leu Gln Ser Glu Ser Glu Pro
180 185 190
Leu Ser Leu Ile Ala Asn Val Val Ala Gly Ser Ser Cys Arg Gly Pro


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<210> 216
 <211> 816
 <212> PRT
 <213> Homo sapiens

<400> 216

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Asp	Ser	Pro	Pro	Gly	Glu	Glu	Asp	Leu	Leu	Val	His	Val	Ala	Glu	Gly
		20						25					30		
Ser	Lys	Ser	Pro	Trp	His	His	Ile	Glu	Asn	Leu	Asp	Leu	Phe	Phe	Ser
		35					40					45			
Arg	Val	Tyr	Asn	Leu	His	Gln	Lys	Asn	Gly	Phe	Thr	Cys	Met	Leu	Ile
	50					55					60				
Gly	Glu	Ile	Phe	Glu	Leu	Met	Gln	Phe	Leu	Phe	Val	Val	Ala	Phe	Thr
65						70				75					80
Thr	Phe	Leu	Val	Ser	Cys	Val	Asp	Tyr	Asp	Ile	Leu	Phe	Ala	Asn	Lys
				85					90					95	
Met	Val	Asn	His	Ser	Leu	His	Pro	Thr	Glu	Pro	Val	Lys	Val	Thr	Leu
			100					105					110		
Pro	Asp	Ala	Phe	Leu	Pro	Ala	Gln	Val	Cys	Ser	Ala	Arg	Ile	Gln	Glu
		115					120					125			
Asn	Gly	Ser	Leu	Ile	Thr	Ile	Leu	Val	Ile	Ala	Gly	Val	Phe	Trp	Ile
	130					135					140				
His	Arg	Leu	Ile	Lys	Phe	Ile	Tyr	Asn	Ile	Cys	Cys	Tyr	Trp	Glu	Ile
145					150					155					160
His	Ser	Phe	Tyr	Leu	His	Ala	Leu	Arg	Ile	Pro	Met	Ser	Ala	Leu	Pro
				165					170					175	
Tyr	Cys	Thr	Trp	Gln	Glu	Val	Gln	Ala	Arg	Ile	Val	Gln	Thr	Gln	Lys
			180					185					190		
Glu	His	Gln	Ile	Cys	Ile	His	Lys	Arg	Glu	Leu	Thr	Glu	Leu	Asp	Ile
	195						200					205			
Tyr	His	Arg	Ile	Leu	Arg	Phe	Gln	Asn	Tyr	Met	Val	Ala	Leu	Val	Asn
	210					215					220				
Lys	Ser	Leu	Leu	Pro	Leu	Arg	Phe	Arg	Leu	Pro	Gly	Leu	Gly	Glu	Ala
225					230					235					240
Val	Phe	Phe	Thr	Arg	Gly	Leu	Lys	Tyr	Asn	Phe	Glu	Leu	Ile	Leu	Phe

690						695						700					
His	Val	Trp	His	Arg	Arg	Glu	Ser	Asp	Glu	Ser	Gly	Glu	Ser	Ala	Pro		
705						710					715				720		
Asp	Glu	Gly	Gly	Glu	Gly	Ala	Arg	Ala	Pro	Gln	Ser	Ile	Pro	Arg	Ser		
					725					730					735		
Ala	Ser	Tyr	Pro	Cys	Ala	Ala	Pro	Arg	Pro	Gly	Ala	Pro	Glu	Thr	Thr		
			740					745				750					
Ala	Leu	His	Gly	Gly	Phe	Gln	Arg	Arg	Tyr	Gly	Gly	Ile	Thr	Asp	Pro		
		755					760					765					
Gly	Thr	Val	Pro	Arg	Val	Pro	Ser	His	Phe	Ser	Arg	Leu	Pro	Leu	Gly		
	770					775					780						
Gly	Trp	Ala	Glu	Asp	Gly	Gln	Ser	Ala	Ser	Arg	His	Pro	Glu	Pro	Val		
785					790					795					800		
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<211> 2989

<212> DNA

<213> Homo sapiens

<400> 221

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agagatggca	agggtttttt	cagcatctcg	tttatgtgtg	gaatttaaaa	agaataaagt	2940
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<210> 222
 <211> 795
 <212> DNA
 <213> Homo sapiens

<400> 222
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aagccattag tgctctggtc tctgaccett gcagtcttca gtatattcgg tgctcttcga 240
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tcccagatca ctcagatgct gatgggctgt gtgggttaact acctgggtct ctgctgggat 660
cagcatgacc agtgtcactc tcactttcag aacatcttct ggctcctact catgtacctc 720
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<210> 223
 <211> 265
 <212> PRT
 <213> Homo sapiens

<400> 223

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Phe	Asn	Glu	Asn	Glu	Ala	Ile	Gln	Trp	Met	Gln	Glu	Asn	Trp	Lys	Lys
			20					25					30		
Ser	Phe	Leu	Phe	Ser	Ala	Leu	Tyr	Ala	Ala	Phe	Ile	Phe	Gly	Gly	Arg
		35					40					45			
His	Leu	Met	Asn	Lys	Arg	Ala	Lys	Phe	Glu	Leu	Arg	Lys	Pro	Leu	Val
	50					55					60				
Leu	Trp	Ser	Leu	Thr	Leu	Ala	Val	Phe	Ser	Ile	Phe	Gly	Ala	Leu	Arg
65					70				75					80	
Thr	Gly	Ala	Tyr	Met	Val	Tyr	Ile	Leu	Met	Thr	Lys	Gly	Leu	Lys	Gln
				85				90					95		
Ser	Val	Cys	Asp	Gln	Gly	Phe	Tyr	Asn	Gly	Pro	Val	Ser	Lys	Phe	Trp
			100					105					110		
Ala	Tyr	Ala	Phe	Val	Leu	Ser	Lys	Ala	Pro	Glu	Leu	Gly	Asp	Thr	Ile
		115					120					125			
Phe	Ile	Ile	Leu	Arg	Lys	Gln	Lys	Leu	Ile	Phe	Leu	His	Trp	Tyr	His
	130				135					140					
His	Ile	Thr	Val	Leu	Leu	Tyr	Ser	Trp	Tyr	Ser	Tyr	Lys	Asp	Met	Val
145					150				155					160	
Ala	Gly	Gly	Gly	Trp	Phe	Met	Thr	Met	Asn	Tyr	Gly	Val	His	Ala	Val
				165				170						175	
Met	Tyr	Ser	Tyr	Tyr	Ala	Leu	Arg	Ala	Ala	Gly	Phe	Arg	Val	Ser	Arg
		180					185						190		
Lys	Phe	Ala	Met	Phe	Ile	Thr	Leu	Ser	Gln	Ile	Thr	Gln	Met	Leu	Met
		195				200						205			
Gly	Cys	Val	Val	Asn	Tyr	Leu	Val	Phe	Cys	Trp	Met	Gln	His	Asp	Gln
	210				215						220				
Cys	His	Ser	His	Phe	Gln	Asn	Ile	Phe	Trp	Ser	Ser	Leu	Met	Tyr	Leu
225					230				235					240	
Ser	Tyr	Leu	Val	Leu	Phe	Cys	His	Phe	Phe	Phe	Glu	Ala	Tyr	Ile	Gly
			245					250						255	
Lys	Met	Arg	Lys	Thr	Thr	Lys	Ala	Glu							
			260				265								

<210> 224

<211> 46
 <212> PRT
 <213> Homo sapiens

<400> 224
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 Phe Asn Glu Asn Glu Ala Ile Gln Trp Met Gln Glu Asn Trp Lys Lys
 20 25 30
 Ser Phe Leu Phe Ser Ala Leu Tyr Ala Ala Phe Ile Phe Gly
 35 40 45

<210> 225
 <211> 219
 <212> PRT
 <213> Homo sapiens

<400> 225
 Gly Arg His Leu Met Asn Lys Arg Ala Lys Phe Glu Leu Arg Lys Pro
 1 5 10 15
 Leu Val Leu Trp Ser Leu Thr Leu Ala Val Phe Ser Ile Phe Gly Ala
 20 25 30
 Leu Arg Thr Gly Ala Tyr Met Val Tyr Ile Leu Met Thr Lys Gly Leu
 35 40 45
 Lys Gln Ser Val Cys Asp Gln Gly Phe Tyr Asn Gly Pro Val Ser Lys
 50 55 60
 Phe Trp Ala Tyr Ala Phe Val Leu Ser Lys Ala Pro Glu Leu Gly Asp
 65 70 75 80
 Thr Ile Phe Ile Ile Leu Arg Lys Gln Lys Leu Ile Phe Leu His Trp
 85 90 95
 Tyr His His Ile Thr Val Leu Leu Tyr Ser Trp Tyr Ser Tyr Lys Asp
 100 105 110
 Met Val Ala Gly Gly Gly Trp Phe Met Thr Met Asn Tyr Gly Val His
 115 120 125
 Ala Val Met Tyr Ser Tyr Tyr Ala Leu Arg Ala Ala Gly Phe Arg Val
 130 135 140
 Ser Arg Lys Phe Ala Met Phe Ile Thr Leu Ser Gln Ile Thr Gln Met
 145 150 155 160
 Leu Met Gly Cys Val Val Asn Tyr Leu Val Phe Cys Trp Met Gln His
 165 170 175
 Asp Gln Cys His Ser His Phe Gln Asn Ile Phe Trp Ser Ser Leu Met
 180 185 190
 Tyr Leu Ser Tyr Leu Val Leu Phe Cys His Phe Phe Phe Glu Ala Tyr
 195 200 205
 Ile Gly Lys Met Arg Lys Thr Thr Lys Ala Glu
 210 215

<210> 226
 <211> 16
 <212> PRT
 <213> Homo sapiens

<400> 226
 Gly Arg His Leu Met Asn Lys Arg Ala Lys Phe Glu Leu Arg Lys Pro
 1 5 10 15

<210> 227
 <211> 17
 <212> PRT
 <213> Homo sapiens

<400> 227
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 1 5 10 15
 Leu

<210> 228
 <211> 57
 <212> PRT
 <213> Homo sapiens

<400> 228
 Arg Thr Gly Ala Tyr Met Val Tyr Ile Leu Met Thr Lys Gly Leu Lys
 1 5 10 15
 Gln Ser Val Cys Asp Gln Gly Phe Tyr Asn Gly Pro Val Ser Lys Phe
 20 25 30
 Trp Ala Tyr Ala Phe Val Leu Ser Lys Ala Pro Glu Leu Gly Asp Thr
 35 40 45
 Ile Phe Ile Ile Leu Arg Lys Gln Lys
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<210> 229
 <211> 17
 <212> PRT
 <213> Homo Sapiens

<400> 229
 Leu Ile Phe Leu His Trp Tyr His His Ile Thr Val Leu Leu Tyr Ser
 1 5 10 15
 Trp

<210> 230
 <211> 11
 <212> PRT
 <213> Homo sapiens

<400> 230
 Tyr Ser Tyr Lys Asp Met Val Ala Gly Gly Gly
 1 5 10

<210> 231
 <211> 19
 <212> PRT
 <213> Homo sapiens

<400> 231
 Trp Phe Met Thr Met Asn Tyr Gly Val His Ala Val Met Tyr Ser Tyr
 1 5 10 15
 Tyr Ala Leu

<210> 232
 <211> 10
 <212> PRT
 <213> Homo sapiens

<400> 232
 Arg Ala Ala Gly Phe Arg Val Ser Arg Lys
 1 5 10

<210> 233
 <211> 24
 <212> PRT
 <213> Homo sapiens

<400> 233
 Phe Ala Met Phe Ile Thr Leu Ser Gln Ile Thr Gln Met Leu Met Gly
 1 5 10 15
 Cys Val Val Asn Tyr Leu Val Phe
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<210> 234
 <211> 14
 <212> PRT
 <213> Homo sapiens

<400> 234
 Cys Trp Met Gln His Asp Gln Cys His Ser His Phe Gln Asn
 1 5 10

<210> 235
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 235
 Ile Phe Trp Ser Ser Leu Met Tyr Leu Ser Tyr Leu Val Leu Phe Cys
 1 5 10 15
 His Phe Phe Phe
 20

<210> 236
 <211> 14
 <212> PRT
 <213> Homo sapiens

<400> 236
 Glu Ala Tyr Ile Gly Lys Met Arg Lys Thr Thr Lys Ala Glu
 1 5 10

<210> 237

<220>

<223> Unknown

<400> 237
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<210> 238
 <211> 813
 <212> DNA
 <213> Homo sapiens

<400> 238
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 caaaccgtgt gctttgccat ctacacggat gacgccgtag tcagattctg gtcctttctc 360
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 ccactcatct ttgtccactg gtaccaccac agcacagtgc tactgttcac aagctttgga 480
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 atgggtcatca ccagcctgca gattctgcag atgggttctgg gcaccatctt tggcatactg 660
 aattacatct ggaggcagga gaaaggatgc cacacaacaa cggaacactt cttctggtct 720
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<210> 239
 <211> 265
 <212> PRT
 <213> Mus sp.

<400> 239
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 Phe Asn Glu Asn Glu Ala Ile Gln Trp Met Gln Glu Asn Trp Lys Lys
 20 25 30
 Ser Phe Leu Phe Ser Ala Leu Tyr Ala Ala Phe Ile Phe Gly Gly Arg
 35 40 45
 His Leu Met Asn Lys Arg Ala Lys Phe Glu Leu Arg Lys Pro Leu Val
 50 55 60
 Leu Trp Ser Leu Thr Leu Ala Val Phe Ser Ile Phe Gly Ala Leu Arg
 65 70 75 80
 Thr Gly Ala Tyr Met Val Tyr Ile Leu Met Thr Lys Gly Leu Lys Gln
 85 90 95
 Ser Val Cys Asp Gln Gly Phe Tyr Asn Gly Pro Val Ser Lys Phe Trp
 100 105 110
 Ala Tyr Ala Phe Val Leu Ser Lys Ala Pro Glu Leu Gly Asp Thr Ile
 115 120 125
 Phe Ile Ile Leu Arg Lys Gln Lys Leu Ile Phe Leu His Trp Tyr His

130		135		140
His Ile Thr Val Leu Leu Tyr Ser Trp Tyr Ser Tyr Lys Asp Met Val				
145		150		155
Ala Gly Gly Gly Trp Phe Met Thr Met Asn Tyr Gly Val His Ala Val				160
	165		170	
Met Tyr Ser Tyr Trp Ala Leu Arg Ala Ala Gly Phe Arg Val Ser Arg				175
	180		185	190
Lys Phe Ala Met Phe Ile Thr Leu Ser Gln Ile Thr Gln Met Leu Met				
	195		200	205
Gly Cys Val Val Asn Tyr Leu Val Phe Cys Trp Met Gln His Asp Gln				
	210		215	220
Cys His Ser His Phe Gln Asn Ile Phe Trp Ser Ser Leu Met Tyr Leu				
225		230		235
Ser Tyr Leu Val Leu Phe Cys His Phe Phe Glu Ala Tyr Ile Gly				240
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Lys Met Arg Lys Thr Thr Lys Ala Glu				
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<210> 240

<220>

<223> Unknown

<400> 240

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<210> 241

<211> 2032

<212> DNA

<213> Mus sp.

<400> 241

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acctgacata tatttgacca aatcagaaga gagagagaac ctctatgctt caagtaagcg 1920
tcataaattt ttttaagtga tttcacttga gaactcagaa agtcaatgta ttaagagcca 1980
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<210> 242
 <211> 522
 <212> DNA
 <213> Mus sp.

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<400> 242
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aaacagaaac tgatcttcct gcaactggta caccacatca ctgtgctcct gtactcctgg 180
tactcctaca aagacatggg cgctgggggt ggttggttca tgactatgaa ctatggcgtg 240
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tacctggtct tcaactggat gcagcatgac aacgaccagt gctactccca ctttcagaac 420
atcttctggg cctcgtcat gtacctcagc taccttgtgc tcttctgcca tttcttctt 480
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<210> 243
 <211> 174
 <212> PRT
 <213> Mus sp.

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<400> 243
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Lys Phe Trp Ala Tyr Ala Phe Val Leu Ser Lys Ala Pro Glu Leu Gly
 20          25          30
Asp Thr Ile Phe Ile Ile Leu Arg Lys Gln Lys Leu Ile Phe Leu His
 35          40          45
Trp Tyr His His Ile Thr Val Leu Leu Tyr Ser Trp Tyr Ser Tyr Lys
 50          55          60
Asp Met Val Ala Gly Gly Gly Trp Phe Met Thr Met Asn Tyr Gly Val
 65          70          75          80
His Ala Val Met Tyr Ser Tyr Tyr Ala Leu Arg Ala Ala Gly Phe Arg
 85          90          95
Val Ser Arg Lys Phe Ala Met Phe Ile Thr Leu Ser Gln Ile Thr Gln
100          105          110
Met Leu Met Gly Cys Val Ile Asn Tyr Leu Val Phe Asn Trp Met Gln
115          120          125
His Asp Asn Asp Gln Cys Tyr Ser His Phe Gln Asn Ile Phe Trp Ser
130          135          140
Ser Leu Met Tyr Leu Ser Tyr Leu Val Leu Phe Cys His Phe Phe Phe
145          150          155          160
Glu Ala Tyr Ile Gly Lys Val Lys Lys Ala Thr Lys Ala Glu
          165          170

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<210> 244
 <211> 49
 <212> PRT
 <213> Mus sp.

<400> 244
 Leu Lys Gln Ser Val Cys Asp Gln Ser Phe Tyr Asn Gly Pro Val Ser
 1 5 10 15
 Lys Phe Trp Ala Tyr Ala Phe Val Leu Ser Lys Ala Pro Glu Leu Gly
 20 25 30
 Asp Thr Ile Phe Ile Ile Leu Arg Lys Gln Lys Leu Ile Phe Leu His
 35 40 45
 Trp

<210> 245
 <211> 17
 <212> PRT
 <213> Mus sp.

<400> 245
 Tyr His His Ile Thr Val Leu Leu Tyr Ser Trp Tyr Ser Tyr Lys Asp
 1 5 10 15
 Met

<210> 246
 <211> 11
 <212> PRT
 <213> Mus sp.

<400> 246
 Val Ala Gly Gly Gly Trp Phe Met Thr Met Asn
 1 5 10

<210> 247
 <211> 19
 <212> PRT
 <213> Mus sp.

<400> 247
 Tyr Gly Val His Ala Val Met Tyr Ser Tyr Tyr Ala Leu Arg Ala Ala
 1 5 10 15
 Gly Phe Arg

<210> 248
 <211> 10
 <212> PRT
 <213> Mus sp.

<400> 248

Val Ser Arg Lys Phe Ala Met Phe Ile Thr
 1 5 10

<210> 249
 <211> 24
 <212> PRT
 <213> Mus sp.

<400> 249
 Leu Ser Gln Ile Thr Gln Met Leu Met Gly Cys Val Ile Asn Tyr Leu
 1 5 10 15
 Val Phe Asn Trp Met Gln His Asp
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<210> 250
 <211> 16
 <212> PRT
 <213> Mus sp.

<400> 250
 Asn Asp Gln Cys Tyr Ser His Phe Gln Asn Ile Phe Trp Ser Ser Leu
 1 5 10 15

<210> 251
 <211> 974
 <212> DNA
 <213> Rattus sp.

<400> 251
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 caccacatca ctgtgtcct gtactcttgg tactcctaca aagacatggg agctgggggt 120
 ggttggttca tgactatgaa ctatggcgta cagcccgta tgtactctta ctacgccttg 180
 cgggctgcgg gtttccgggt ctcccgaag ttgccaatgt tcatcacgtt gtcccagatc 240
 actcagatgc tgatgggctg tgtcattaac tacctgggtc tcaactggat gcagcatgac 300
 aatgaccagt gctactccca ctttcagaac atcttctggg cctcactcat gtacctcagc 360
 taccttctgc tcttctgcc tttcttctt gaggcctaca tgggcaaagt gaagaaagcg 420
 acgaaggccg agtagtgtca gagctgagga ggaagacata gctcagggtc atcacgaaaa 480
 ataatagaca aaaagaaaat ggcacaagga atcacatatg gtgcagctaa aacaaaacaa 540
 aacattatga gcagacgcta agccaaggc agcttgggag tgaagattag gttgtaagtt 600
 tatgatcctt tttgggtgag gactcactga gaacactgct gctgagggac ccccttcct 660
 cttacctgtc aactctagaa cacactagaa gccaaaggcag ccatgggcaa ggagattagt 720
 ggacagcaag caaaacactg caggaagagg ggggagatct attcagagtt ttttgttttg 780
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 cccacgcgca tgcagacaca cccacctaca cactatctgc agatgaccag tgtcctatgc 900
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 aaaaaaaaaa aaaa 974

<210> 252
 <211> 432
 <212> DNA
 <213> Rattus sp.

<400> 252
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 gggttggttca tgactatgaa ctatggcgta cacgccgtca tgtactctta ctacgccttg 180
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 aatgaccagt gctactccca ctttcagaac atcttctggt cctcactcat gtacctcagc 360
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 acgaaggccg ag 432

<210> 253
 <211> 144
 <212> PRT

<213> Rattus sp.

<400> 253
 Leu Gly Asp Thr Ile Phe Ile Ile Leu Arg Lys Gln Lys Leu Ile Phe
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 Leu His Trp Tyr His His Ile Thr Val Leu Leu Tyr Ser Trp Tyr Ser
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 Tyr Lys Asp Met Val Ala Gly Gly Gly Trp Phe Met Thr Met Asn Tyr
 35 40 45
 Gly Val His Ala Val Met Tyr Ser Tyr Tyr Ala Leu Arg Ala Ala Gly
 50 55 60
 Phe Arg Val Ser Arg Lys Phe Ala Met Phe Ile Thr Leu Ser Gln Ile
 65 70 75 80
 Thr Gln Met Leu Met Gly Cys Val Ile Asn Tyr Leu Val Phe Asn Trp
 85 90 95
 Met Gln His Asp Asn Asp Gln Cys Tyr Ser His Phe Gln Asn Ile Phe
 100 105 110
 Trp Ser Ser Leu Met Tyr Leu Ser Tyr Leu Leu Leu Phe Cys His Phe
 115 120 125
 Phe Phe Glu Ala Tyr Ile Gly Lys Val Lys Lys Ala Thr Lys Ala Glu
 130 135 140

<210> 254

<220>
 <223> Unknown

<400> 254
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<223> Unknown

<400> 270

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<210> 271
 <211> 2895
 <212> DNA
 <213> Homo sapiens

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cgggtgccacc catgtcgcac tagagcagaa gagggtgagt cctgaactgc aacctgcaca 180
gagctgctct gtactgtccc tgggtggtgc cgccatgacc tgggtggtgc tgctggggac 240
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tgcgctccac aactgcccct acaaatgtat ctgcgtgcgc gacctgctaa gctgcaactg 360
cctagggctg caggacgtgc cagccgagtt acctgccgt actgcggacc tcgacctgag 420
ccacaacgcg ctccagcgcc tgcgcccccg ctgggtggcg cccctcttcc agctgcgcgc 480
cctgcaccta gaccacaacg aactagatgc gctgggtcgc ggcgtcttcg tcaacgccag 540
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<210> 272
 <211> 1365
 <212> DNA
 <213> Homo sapiens

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 gctgcccagc tgctaagctg cactggccta gggctgcagg acgtgccagc cgagttacct 180
 gccgctactg cggacctcga cctgagccac aacgcgctcc agcgccctgcg ccccggtggt 240
 ttggcgcccc tcttccagct gcgcgcccctg cacctagacc acaacgaact agatgcgctg 300
 ggtcgcgggc tcttcgtcaa cgccagcggc ctgaggctgc tcgatctatc atctaacacg 360
 ttgcgggcgc ttggccgcca cgacctcgac gggctggggg cgctggagaa gctgcttctg 420
 ttcaataacc gcttgggtgca cttggacgag catgccttcc acggcctgcg cgcgctcagc 480
 catctctacc tgggctgcaa cgaactcgcc tcgttctcct tcgaccacct gcacgggtctg 540
 agcgccaccc acctgcttac tctggacctc tcctccaacc ggctgggaca catctccgta 600
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 ttgccttgcg actgccgctt ctaccacctg ctacagcgct ggcaccagcg gggcctgagc 720
 gccgtgcgcg actttgcgcg cgagtacgta tgcttggcct tcaaggtacc cgcgtcccgc 780
 gtgcgcttct tccagcacag ccgcgtcctt gagaactgct cgtcggcccc agctcttggc 840
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 aacaccagcg tcccggccat gcgcattgcc tgggtttcgc cgcagcagga gcttctcagg 960
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 aacgtacagg agcagcatgc gggactcttc gtgtgcctgg ccactgggcc ccgcctgcac 1080
 cacaaccaga cgcacgagta caacgtgagc gtgcactttc cgcgcccaga gcccgaggct 1140
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 tacctgttcg cccacacctg ccgctgctgc cgccgtgcct gcccgctgcc gccgctggcc 1260
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<210> 273
 <211> 455
 <212> PRT
 <213> Homo sapiens

<400> 273
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 35 40 45
 Gly Leu Gly Leu Gln Asp Val Pro Ala Glu Leu Pro Ala Ala Thr Ala
 50 55 60
 Asp Leu Asp Leu Ser His Asn Ala Leu Gln Arg Leu Arg Pro Gly Trp
 65 70 75 80
 Leu Ala Pro Leu Phe Gln Leu Arg Ala Leu His Leu Asp His Asn Glu
 85 90 95
 Leu Asp Ala Leu Gly Arg Gly Val Phe Val Asn Ala Ser Gly Leu Arg
 100 105 110
 Leu Leu Asp Leu Ser Ser Asn Thr Leu Arg Ala Leu Gly Arg His Asp
 115 120 125
 Leu Asp Gly Leu Gly Ala Leu Glu Lys Leu Leu Leu Phe Asn Asn Arg
 130 135 140
 Leu Val His Leu Asp Glu His Ala Phe His Gly Leu Arg Ala Leu Ser
 145 150 155 160

His	Leu	Tyr	Leu	Gly	Cys	Asn	Glu	Leu	Ala	Ser	Phe	Ser	Phe	Asp	His
				165					170					175	
Leu	His	Gly	Leu	Ser	Ala	Thr	His	Leu	Leu	Thr	Leu	Asp	Leu	Ser	Ser
			180					185					190		
Asn	Arg	Leu	Gly	His	Ile	Ser	Val	Pro	Glu	Leu	Ala	Ala	Leu	Pro	Ala
		195					200					205			
Phe	Leu	Lys	Asn	Gly	Leu	Tyr	Leu	His	Asn	Asn	Pro	Leu	Pro	Cys	Asp
	210					215					220				
Cys	Arg	Leu	Tyr	His	Leu	Leu	Gln	Arg	Trp	His	Gln	Arg	Gly	Leu	Ser
225					230					235					240
Ala	Val	Arg	Asp	Phe	Ala	Arg	Glu	Tyr	Val	Cys	Leu	Ala	Phe	Lys	Val
				245					250					255	
Pro	Ala	Ser	Arg	Val	Arg	Phe	Phe	Gln	His	Ser	Arg	Val	Phe	Glu	Asn
			260					265					270		
Cys	Ser	Ser	Ala	Pro	Ala	Leu	Gly	Leu	Lys	Arg	Pro	Glu	Glu	His	Leu
		275					280					285			
Tyr	Ala	Leu	Val	Gly	Arg	Ser	Leu	Arg	Leu	Tyr	Cys	Asn	Thr	Ser	Val
	290					295					300				
Pro	Ala	Met	Arg	Ile	Ala	Trp	Val	Ser	Pro	Gln	Gln	Glu	Leu	Leu	Arg
305					310					315					320
Ala	Pro	Gly	Ser	Arg	Asp	Gly	Ser	Ile	Ala	Val	Leu	Ala	Asp	Gly	Ser
				325					330					335	
Leu	Ala	Ile	Gly	Asn	Val	Gln	Glu	Gln	His	Ala	Gly	Leu	Phe	Val	Cys
			340					345					350		
Leu	Ala	Thr	Gly	Pro	Arg	Leu	His	His	Asn	Gln	Thr	His	Glu	Tyr	Asn
		355					360					365			
Val	Ser	Val	His	Phe	Pro	Arg	Pro	Glu	Pro	Glu	Ala	Phe	Asn	Thr	Gly
	370					375					380				
Phe	Thr	Thr	Leu	Leu	Gly	Cys	Ala	Val	Gly	Leu	Val	Leu	Val	Leu	Leu
385					390					395					400
Tyr	Leu	Phe	Ala	Pro	Pro	Cys	Arg	Cys	Cys	Arg	Arg	Ala	Cys	Pro	Leu
				405					410					415	
Pro	Pro	Leu	Ala	Pro	Asn	Thr	Gln	Pro	Ala	Pro	Arg	Ala	Glu	Pro	His
				420				425					430		
Lys	Ser	Ser	Val	Leu	Ser	Thr	Thr	Pro	Pro	Asp	Ala	Pro	Ser	Pro	Gln
		435					440					445			
Gly	Gln	Ala	Ser	Thr	Ser	Thr									
	450					455									

<210> 274
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 274
 Met Thr Trp Leu Val Leu Leu Gly Thr Leu Leu Cys Met Leu Arg Val
 1 5 10 15
 Gly Leu Gly Thr
 20

<210> 275
 <211> 435
 <212> PRT

<213> Homo sapiens

<400> 275

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Lys	Cys	Ile	Cys	Ala	Ala	Asp	Leu	Leu	Ser	Cys	Thr	Gly	Leu	Gly	Leu
			20					25					30		
Gln	Asp	Val	Pro	Ala	Glu	Leu	Pro	Ala	Ala	Thr	Ala	Asp	Leu	Asp	Leu
		35					40					45			
Ser	His	Asn	Ala	Leu	Gln	Arg	Leu	Arg	Pro	Gly	Trp	Leu	Ala	Pro	Leu
	50					55					60				
Phe	Gln	Leu	Arg	Ala	Leu	His	Leu	Asp	His	Asn	Glu	Leu	Asp	Ala	Leu
65					70					75					80
Gly	Arg	Gly	Val	Phe	Val	Asn	Ala	Ser	Gly	Leu	Arg	Leu	Leu	Asp	Leu
				85					90					95	
Ser	Ser	Asn	Thr	Leu	Arg	Ala	Leu	Gly	Arg	His	Asp	Leu	Asp	Gly	Leu
			100					105					110		
Gly	Ala	Leu	Glu	Lys	Leu	Leu	Leu	Phe	Asn	Asn	Arg	Leu	Val	His	Leu
	115						120					125			
Asp	Glu	His	Ala	Phe	His	Gly	Leu	Arg	Ala	Leu	Ser	His	Leu	Tyr	Leu
	130					135					140				
Gly	Cys	Asn	Glu	Leu	Ala	Ser	Phe	Ser	Phe	Asp	His	Leu	His	Gly	Leu
145					150					155					160
Ser	Ala	Thr	His	Leu	Leu	Thr	Leu	Asp	Leu	Ser	Ser	Asn	Arg	Leu	Gly
				165					170					175	
His	Ile	Ser	Val	Pro	Glu	Leu	Ala	Ala	Leu	Pro	Ala	Phe	Leu	Lys	Asn
			180					185					190		
Gly	Leu	Tyr	Leu	His	Asn	Asn	Pro	Leu	Pro	Cys	Asp	Cys	Arg	Leu	Tyr
	195						200					205			
His	Leu	Leu	Gln	Arg	Trp	His	Gln	Arg	Gly	Leu	Ser	Ala	Val	Arg	Asp
	210				215						220				
Phe	Ala	Arg	Glu	Tyr	Val	Cys	Leu	Ala	Phe	Lys	Val	Pro	Ala	Ser	Arg
225					230					235					240
Val	Arg	Phe	Phe	Gln	His	Ser	Arg	Val	Phe	Glu	Asn	Cys	Ser	Ser	Ala
				245					250					255	
Pro	Ala	Leu	Gly	Leu	Lys	Arg	Pro	Glu	Glu	His	Leu	Tyr	Ala	Leu	Val
			260					265					270		
Gly	Arg	Ser	Leu	Arg	Leu	Tyr	Cys	Asn	Thr	Ser	Val	Pro	Ala	Met	Arg
	275						280					285			
Ile	Ala	Trp	Val	Ser	Pro	Gln	Gln	Glu	Leu	Leu	Arg	Ala	Pro	Gly	Ser
	290					295					300				
Arg	Asp	Gly	Ser	Ile	Ala	Val	Leu	Ala	Asp	Gly	Ser	Leu	Ala	Ile	Gly
305					310					315					320
Asn	Val	Gln	Glu	Gln	His	Ala	Gly	Leu	Phe	Val	Cys	Leu	Ala	Thr	Gly
				325					330					335	
Pro	Arg	Leu	His	His	Asn	Gln	Thr	His	Glu	Tyr	Asn	Val	Ser	Val	His
			340					345					350		
Phe	Pro	Arg	Pro	Glu	Pro	Glu	Ala	Phe	Asn	Thr	Gly	Phe	Thr	Thr	Leu
		355					360					365			
Leu	Gly	Cys	Ala	Val	Gly	Leu	Val	Leu	Val	Leu	Leu	Tyr	Leu	Phe	Ala
	370					375					380				
Pro	Pro	Cys	Arg	Cys	Cys	Arg	Arg	Ala	Cys	Pro	Leu	Pro	Pro	Leu	Ala
385					390					395					400
Pro	Asn	Thr	Gln	Pro	Ala	Pro	Arg	Ala	Glu	Pro	His	Lys	Ser	Ser	Val
				405					410					415	
Leu	Ser	Thr	Thr	Pro	Pro	Asp	Ala	Pro	Ser	Pro	Gln	Gly	Gln	Ala	Ser
			420					425					430		

Thr Ser Thr
435

<210> 276
<211> 363
<212> PRT
<213> Homo sapiens

<400> 276
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Lys Cys Ile Cys Ala Ala Asp Leu Leu Ser Cys Thr Gly Leu Gly Leu
20 25 30
Gln Asp Val Pro Ala Glu Leu Pro Ala Ala Thr Ala Asp Leu Asp Leu
35 40 45
Ser His Asn Ala Leu Gln Arg Leu Arg Pro Gly Trp Leu Ala Pro Leu
50 55 60
Phe Gln Leu Arg Ala Leu His Leu Asp His Asn Glu Leu Asp Ala Leu
65 70 75 80
Gly Arg Gly Val Phe Val Asn Ala Ser Gly Leu Arg Leu Leu Asp Leu
85 90 95
Ser Ser Asn Thr Leu Arg Ala Leu Gly Arg His Asp Leu Asp Gly Leu
100 105 110
Gly Ala Leu Glu Lys Leu Leu Leu Phe Asn Asn Arg Leu Val His Leu
115 120 125
Asp Glu His Ala Phe His Gly Leu Arg Ala Leu Ser His Leu Tyr Leu
130 135 140
Gly Cys Asn Glu Leu Ala Ser Phe Ser Phe Asp His Leu His Gly Leu
145 150 155 160
Ser Ala Thr His Leu Leu Thr Leu Asp Leu Ser Ser Asn Arg Leu Gly
165 170 175
His Ile Ser Val Pro Glu Leu Ala Ala Leu Pro Ala Phe Leu Lys Asn
180 185 190
Gly Leu Tyr Leu His Asn Asn Pro Leu Pro Cys Asp Cys Arg Leu Tyr
195 200 205
His Leu Leu Gln Arg Trp His Gln Arg Gly Leu Ser Ala Val Arg Asp
210 215 220
Phe Ala Arg Glu Tyr Val Cys Leu Ala Phe Lys Val Pro Ala Ser Arg
225 230 235 240
Val Arg Phe Phe Gln His Ser Arg Val Phe Glu Asn Cys Ser Ser Ala
245 250 255
Pro Ala Leu Gly Leu Lys Arg Pro Glu Glu His Leu Tyr Ala Leu Val
260 265 270
Gly Arg Ser Leu Arg Leu Tyr Cys Asn Thr Ser Val Pro Ala Met Arg
275 280 285
Ile Ala Trp Val Ser Pro Gln Gln Glu Leu Leu Arg Ala Pro Gly Ser
290 295 300
Arg Asp Gly Ser Ile Ala Val Leu Ala Asp Gly Ser Leu Ala Ile Gly
305 310 315 320
Asn Val Gln Glu Gln His Ala Gly Leu Phe Val Cys Leu Ala Thr Gly
325 330 335
Pro Arg Leu His His Asn Gln Thr His Glu Tyr Asn Val Ser Val His
340 345 350
Phe Pro Arg Pro Glu Pro Glu Ala Phe Asn Thr
355 360

<210> 277
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 277
 Gly Phe Thr Thr Leu Leu Gly Cys Ala Val Gly Leu Val Leu Val Leu
 1 5 10 15
 Leu Tyr Leu Phe
 20

<210> 278
 <211> 52
 <212> PRT
 <213> Homo sapiens

<400> 278
 Ala Pro Pro Cys Arg Cys Cys Arg Arg Ala Cys Pro Leu Pro Pro Leu
 1 5 10 15
 Ala Pro Asn Thr Gln Pro Ala Pro Arg Ala Glu Pro His Lys Ser Ser
 20 25 30
 Val Leu Ser Thr Thr Pro Pro Asp Ala Pro Ser Pro Gln Gly Gln Ala
 35 40 45
 Ser Thr Ser Thr
 50

<210> 279
 <211> 1518
 <212> DNA
 <213> Homo sapiens

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 gcggacaatt tcatggccga gggctgtgga gggagcaagg agcacagctt ccagcatccc 180
 ttctctccagg cagtgggcat gttcctggga gaattctcct gcctggctgc cttctacctc 240
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 gacagtcagc acaagctcag cgaagtgatc acaggggacc tgttgatcat catggcccag 600
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 ccaactgcggg cagttggcac tgagggcctc tttggctttg tgatcctctc cctgctgctg 720
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 gatcgattgg acgccttctg ccaggtgggc cagcagccgc tcattgccgt ggcaactgctg 840
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 agcgccacca cccgcattgt gttggacagc ttgcgcaccg ttgtcatctg ggcaactgagc 960
 ctggcactgg gctgggaggc cttccatgca ctgcagatcc ttggcttctc catactcctt 1020
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 cggcccttgg cagaggagag cgagcaggag agactgctgg gtggcaccgc cactcccatc 1140
 aatgatgcca gctgagggtt cctggaggct tctactgcca cccgggtgct ccttctcctt 1200
 gagactgagg ccacacaggc tgggtggccc cgaatgcctt atccccaagg cctcacctgt 1260


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tcccctccct gcagaacccc cagggcagct gctgccacag aagataacaa cacccaagtc 1320
ctctttttct cactaccacc tgcaggggtg tgttaccag cccccacaag cctgagtgc 1380
gtggcagacc tcagctctct ggacccctcc tacagcacta gagctaaatc atgaagttga 1440
attgtaggaa tttaccaccg tagtgtatct gaatcataaa ctagattatc ataaaaaaaa 1500
aaaaaaaaag gcggccgc                                     1518

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<210> 280
<211> 1113
<212> DNA
<213> Homo sapiens

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<400> 280
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gagcacagct tccagcatcc ctctctccag gcagtgggca tgttcctggg agaattctcc 180
tgcttggttg ccttctacct cctccgatgc agagctgcag ggcaatcaga ctccagcgta 240
gacccccagc agcccttcaa ccctcttctt ttctgcccc cagcgctctg tgacatgaca 300
gggaccagcc tcatgtatgt ggctctgaac atgaccagtg cctccagctt ccagatgctg 360
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gtgctgagcc agtggtctggg catcctagcc accatcgcg ggctgggtgt cgtgggcctg 480
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ctgttgatca tcatggccca gatcatcgtt gccatccaga tgggtgctaga ggagaagttc 600
gtctacaaac acaatgtgca cccactgcgg gcagttggca ctgagggcct ctttggtctt 660
gtgactctct ccctgctgct ggtgcccatt tactacatcc ccgccggctc cttcagcgga 720
aaccctcgtg ggacactgga ggatgcattg gacgccttct gccaggtggg ccagcagccg 780
ctcattgccg tggcactgct gggcaacatc agcagcattg ccttcttcaa cttcgcaggc 840
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gttgatcatc gggcactgag cctggcactg ggctgggagg ccttccatgc actgcagatc 960
cttggtcttc tcatactcct tataggcact gccctctaca atgggctaca ccgtccgctg 1020
ctgggcccgc tgtccagggg ccggcccctg gcagaggaga gcgagcagga gagactgctg 1080
ggtggcacc gcactcccat caatgatgcc agc                                     1113

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<210> 281
<211> 371
<212> PRT
<213> Homo sapiens

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<400> 281
Met Ala Trp Thr Lys Tyr Gln Leu Phe Leu Ala Gly Leu Met Leu Val
1      5      10      15
Thr Gly Ser Ile Asn Thr Leu Ser Ala Lys Trp Ala Asp Asn Phe Met
20     25     30
Ala Glu Gly Cys Gly Gly Ser Lys Glu His Ser Phe Gln His Pro Phe
35     40     45
Leu Gln Ala Val Gly Met Phe Leu Gly Glu Phe Ser Cys Leu Ala Ala
50     55     60
Phe Tyr Leu Leu Arg Cys Arg Ala Ala Gly Gln Ser Asp Ser Ser Val
65     70     75     80
Asp Pro Gln Gln Pro Phe Asn Pro Leu Leu Phe Leu Pro Pro Ala Leu
85     90     95
Cys Asp Met Thr Gly Thr Ser Leu Met Tyr Val Ala Leu Asn Met Thr
100    105    110
Ser Ala Ser Ser Phe Gln Met Leu Arg Gly Ala Val Ile Ile Phe Thr
115    120    125
Gly Leu Phe Ser Val Ala Phe Leu Gly Arg Arg Leu Val Leu Ser Gln
130    135    140
Trp Leu Gly Ile Leu Ala Thr Ile Ala Gly Leu Val Val Val Gly Leu

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145 150 155 160
 Ala Asp Leu Leu Ser Lys His Asp Ser Gln His Lys Leu Ser Glu Val
 165 170 175
 Ile Thr Gly Asp Leu Leu Ile Ile Met Ala Gln Ile Ile Val Ala Ile
 180 185 190
 Gln Met Val Leu Glu Glu Lys Phe Val Tyr Lys His Asn Val His Pro
 195 200 205
 Leu Arg Ala Val Gly Thr Glu Gly Leu Phe Gly Phe Val Ile Leu Ser
 210 215 220
 Leu Leu Leu Val Pro Met Tyr Tyr Ile Pro Ala Gly Ser Phe Ser Gly
 225 230 235 240
 Asn Pro Arg Gly Thr Leu Glu Asp Ala Leu Asp Ala Phe Cys Gln Val
 245 250 255
 Gly Gln Gln Pro Leu Ile Ala Val Ala Leu Leu Gly Asn Ile Ser Ser
 260 265 270
 Ile Ala Phe Phe Asn Phe Ala Gly Ile Ser Val Thr Lys Glu Leu Ser
 275 280 285
 Ala Thr Thr Arg Met Val Leu Asp Ser Leu Arg Thr Val Val Ile Trp
 290 295 300
 Ala Leu Ser Leu Ala Leu Gly Trp Glu Ala Phe His Ala Leu Gln Ile
 305 310 315 320
 Leu Gly Phe Leu Ile Leu Leu Ile Gly Thr Ala Leu Tyr Asn Gly Leu
 325 330 335
 His Arg Pro Leu Leu Gly Arg Leu Ser Arg Gly Arg Pro Leu Ala Glu
 340 345 350
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 Asp Ala Ser
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<210> 282
 <211> 18
 <212> PRT
 <213> Homo sapiens

<400> 282
 Met Ala Trp Thr Lys Tyr Gln Leu Phe Leu Ala Gly Leu Met Leu Val
 1 5 10 15
 Thr Gly

<210> 283
 <211> 353
 <212> PRT
 <213> Homo sapiens

<400> 283
 Ser Ile Asn Thr Leu Ser Ala Lys Trp Ala Asp Asn Phe Met Ala Glu
 1 5 10 15
 Gly Cys Gly Gly Ser Lys Glu His Ser Phe Gln His Pro Phe Leu Gln
 20 25 30
 Ala Val Gly Met Phe Leu Gly Glu Phe Ser Cys Leu Ala Ala Phe Tyr
 35 40 45
 Leu Leu Arg Cys Arg Ala Ala Gly Gln Ser Asp Ser Ser Val Asp Pro
 50 55 60

Gln	Gln	Pro	Phe	Asn	Pro	Leu	Leu	Phe	Leu	Pro	Pro	Ala	Leu	Cys	Asp
65				70					75					80	
Met	Thr	Gly	Thr	Ser	Leu	Met	Tyr	Val	Ala	Leu	Asn	Met	Thr	Ser	Ala
				85					90					95	
Ser	Ser	Phe	Gln	Met	Leu	Arg	Gly	Ala	Val	Ile	Ile	Phe	Thr	Gly	Leu
			100					105					110		
Phe	Ser	Val	Ala	Phe	Leu	Gly	Arg	Arg	Leu	Val	Leu	Ser	Gln	Trp	Leu
		115					120					125			
Gly	Ile	Leu	Ala	Thr	Ile	Ala	Gly	Leu	Val	Val	Val	Gly	Leu	Ala	Asp
	130					135					140				
Leu	Leu	Ser	Lys	His	Asp	Ser	Gln	His	Lys	Leu	Ser	Glu	Val	Ile	Thr
145				150					155					160	
Gly	Asp	Leu	Leu	Ile	Ile	Met	Ala	Gln	Ile	Ile	Val	Ala	Ile	Gln	Met
			165					170						175	
Val	Leu	Glu	Glu	Lys	Phe	Val	Tyr	Lys	His	Asn	Val	His	Pro	Leu	Arg
		180					185						190		
Ala	Val	Gly	Thr	Glu	Gly	Leu	Phe	Gly	Phe	Val	Ile	Leu	Ser	Leu	Leu
		195					200					205			
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	210				215					220					
Arg	Gly	Thr	Leu	Glu	Asp	Ala	Leu	Asp	Ala	Phe	Cys	Gln	Val	Gly	Gln
225				230						235					240
Gln	Pro	Leu	Ile	Ala	Val	Ala	Leu	Leu	Gly	Asn	Ile	Ser	Ser	Ile	Ala
			245						250					255	
Phe	Phe	Asn	Phe	Ala	Gly	Ile	Ser	Val	Thr	Lys	Glu	Leu	Ser	Ala	Thr
		260					265						270		
Thr	Arg	Met	Val	Leu	Asp	Ser	Leu	Arg	Thr	Val	Val	Ile	Trp	Ala	Leu
	275					280						285			
Ser	Leu	Ala	Leu	Gly	Trp	Glu	Ala	Phe	His	Ala	Leu	Gln	Ile	Leu	Gly
	290				295					300					
Phe	Leu	Ile	Leu	Leu	Ile	Gly	Thr	Ala	Leu	Tyr	Asn	Gly	Leu	His	Arg
305				310						315				320	
Pro	Leu	Leu	Gly	Arg	Leu	Ser	Arg	Gly	Arg	Pro	Leu	Ala	Glu	Glu	Ser
			325					330					335		
Glu	Gln	Glu	Arg	Leu	Leu	Gly	Gly	Thr	Arg	Thr	Pro	Ile	Asn	Asp	Ala
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<210> 284
 <211> 29
 <212> PRT
 <213> Homo sapiens

<400> 284
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<210> 285
 <211> 9
 <212> PRT
 <213> Homo sapiens

<400> 285

Asn Met Thr Ser Ala Ser Ser Phe Gln

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5

<210> 286

<211> 14

<212> PRT

<213> Homo sapiens

<400> 286

Asp Leu Leu Ser Lys His Asp Ser Gln His Lys Leu Ser Glu

1

5

10

<210> 287

<211> 27

<212> PRT

<213> Homo sapiens

<400> 287

Pro Ala Gly Ser Phe Ser Gly Asn Pro Arg Gly Thr Leu Glu Asp Ala

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15

Leu Asp Ala Phe Cys Gln Val Gly Gln Gln Pro

20

25

<210> 288

<211> 7

<212> PRT

<213> Homo sapiens

<400> 288

Glu Ala Phe His Ala Leu Gln

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<210> 289

<211> 21

<212> PRT

<213> Homo sapiens

<400> 289

Phe Leu Gln Ala Val Gly Met Phe Leu Gly Glu Phe Ser Cys Leu Ala

1

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10

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Ala Phe Tyr Leu Leu

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<210> 290

<211> 21

<212> PRT

<213> Homo sapiens

<400> 290

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1

5

10

15

Met Tyr Val Ala Leu
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<210> 291
<211> 19
<212> PRT
<213> Homo sapiens

<400> 291
Met Leu Arg Gly Ala Val Ile Ile Phe Thr Gly Leu Phe Ser Val Ala
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Phe Leu Gly

<210> 292
<211> 17
<212> PRT
<213> Homo sapiens

<400> 292
Trp Leu Gly Ile Leu Ala Thr Ile Ala Gly Leu Val Val Val Gly Leu
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Ala

<210> 293
<211> 17
<212> PRT
<213> Homo sapiens

<400> 293
Val Ile Thr Gly Asp Leu Leu Ile Ile Met Ala Gln Ile Ile Val Ala
1 5 10 15
Ile

<210> 294
<211> 18
<212> PRT
<213> Homo sapiens

<400> 294
Gly Leu Phe Gly Phe Val Ile Leu Ser Leu Leu Leu Val Pro Met Tyr
1 5 10 15
Tyr Ile

<210> 295
<211> 23
<212> PRT
<213> Homo sapiens

<400> 295
 Leu Ile Ala Val Ala Leu Leu Gly Asn Ile Ser Ser Ile Ala Phe Phe
 1 5 10 15
 Asn Phe Ala Gly Ile Ser Val
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<210> 296
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 296
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 1 5 10 15
 Ala Leu Gly Trp
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<210> 297
 <211> 17
 <212> PRT
 <213> Homo sapiens

<400> 297
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 1 5 10 15
 Leu

<210> 298
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 298
 Arg Cys Arg Ala Ala Gly Gln Ser Asp Ser Ser Val Asp Pro Gln Gln
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 Pro Phe Asn Pro
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<210> 299
 <211> 7
 <212> PRT
 <213> Homo sapiens

<400> 299
 Arg Arg Leu Val Leu Ser Gln
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<210> 300
 <211> 23
 <212> PRT

<213> Homo sapiens

<400> 300

Gln Met Val Leu Glu Glu Lys Phe Val Tyr Lys His Asn Val His Pro
1 5 10 15
Leu Arg Ala Val Gly Thr Glu
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<210> 301

<211> 9

<212> PRT

<213> Homo sapiens

<400> 301

Thr Lys Glu Leu Ser Ala Thr Thr Arg
1 5

<210> 302

<211> 35

<212> PRT

<213> Homo sapiens

<400> 302

His Arg Pro Leu Leu Gly Arg Leu Ser Arg Gly Arg Pro Leu Ala Glu
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Glu Ser Glu Gln Glu Arg Leu Leu Gly Gly Thr Arg Thr Pro Ile Asn
20 25 30
Asp Ala Ser
35

<210> 303

<211> 2811

<212> DNA

<213> Homo sapiens

<400> 303

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 <211> 729
 <212> DNA
 <213> Homo sapiens

<400> 304						
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<210> 305
 <211> 243
 <212> PRT
 <213> Homo sapiens

<400> 305
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			20					25					30			
Val	Ser	Ser	Gly	Glu	Leu	Ala	Thr	Val	Val	Arg	Arg	Phe	Ser	Gln	Thr	
		35					40					45				
Gly	Ile	Gln	Asp	Phe	Leu	Thr	Leu	Thr	Leu	Thr	Glu	Pro	Thr	Gly	Leu	
	50					55					60					
Leu	Tyr	Val	Gly	Ala	Arg	Glu	Ala	Leu	Phe	Ala	Phe	Ser	Met	Glu	Ala	
65					70					75					80	
Leu	Glu	Leu	Gln	Gly	Ala	Ile	Ser	Trp	Glu	Ala	Pro	Val	Glu	Lys	Lys	
			85					90						95		
Thr	Glu	Cys	Ile	Gln	Lys	Gly	Lys	Asn	Asn	Gln	Thr	Glu	Cys	Phe	Asn	
			100					105						110		
Phe	Ile	Arg	Phe	Leu	Gln	Pro	Tyr	Asn	Ala	Ser	His	Leu	Tyr	Val	Cys	
		115					120						125			
Gly	Thr	Tyr	Ala	Phe	Gln	Pro	Lys	Cys	Thr	Tyr	Val	Val	Ser	Ala	Ala	
	130					135					140					
Leu	Leu	Pro	Arg	Cys	Pro	Gln	Pro	Pro	Ala	Leu	Leu	Thr	Leu	Leu	Trp	
145					150					155					160	
Thr	Arg	Gly	Cys	Gly	Pro	Gln	Ser	Pro	Ala	Leu	Lys	His	Leu	Leu	Ile	
			165					170						175		
Thr	Ser	Leu	Ser	Val	Leu	Arg	Thr	Cys	Ser	Pro	Ser	Leu	Trp	Ser	Met	
			180					185					190			
Glu	Ser	Leu	Lys	Met	Gly	Arg	Ala	Ser	Val	Pro	Met	Thr	Gln	Leu	Arg	
	195						200					205				
Ala	Met	Leu	Ala	Phe	Leu	Trp	Met	Val	Ser	Cys	Thr	Arg	Pro	His	Ser	
	210					215					220					
Thr	Thr	Ser	Trp	Ala	Arg	Asn	Pro	Leu	Ser	Cys	Val	Thr	Trp	Gly	Pro	
225					230					235					240	
Thr	Thr	Pro														

<210> 306
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 306
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 1 5 10 15
 Leu Gly Ile Gly
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<210> 307
 <211> 223
 <212> PRT
 <213> Homo sapiens

<400> 307
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 1 5 10 15
 Glu Leu Ala Thr Val Val Arg Arg Phe Ser Gln Thr Gly Ile Gln Asp
 20 25 30
 Phe Leu Thr Leu Thr Leu Thr Glu Pro Thr Gly Leu Leu Tyr Val Gly
 35 40 45

Ala	Arg	Glu	Ala	Leu	Phe	Ala	Phe	Ser	Met	Glu	Ala	Leu	Glu	Leu	Gln
50						55					60				
Gly	Ala	Ile	Ser	Trp	Glu	Ala	Pro	Val	Glu	Lys	Lys	Thr	Glu	Cys	Ile
65					70					75					80
Gln	Lys	Gly	Lys	Asn	Asn	Gln	Thr	Glu	Cys	Phe	Asn	Phe	Ile	Arg	Phe
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Leu	Gln	Pro	Tyr	Asn	Ala	Ser	His	Leu	Tyr	Val	Cys	Gly	Thr	Tyr	Ala
			100					105					110		
Phe	Gln	Pro	Lys	Cys	Thr	Tyr	Val	Val	Ser	Ala	Ala	Leu	Leu	Pro	Arg
			115				120					125			
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			130			135					140				
Gly	Pro	Gln	Ser	Pro	Ala	Leu	Lys	His	Leu	Leu	Ile	Thr	Ser	Leu	Ser
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Val	Leu	Arg	Thr	Cys	Ser	Pro	Ser	Leu	Trp	Ser	Met	Glu	Ser	Leu	Lys
				165					170					175	
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			180					185					190		
Phe	Leu	Trp	Met	Val	Ser	Cys	Thr	Arg	Pro	His	Ser	Thr	Thr	Ser	Trp
		195					200					205			
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<210> 308
 <211> 2498
 <212> DNA
 <213> Homo sapiens

<400> 308
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<210> 309
 <211> 678
 <212> DNA
 <213> Homo sapiens

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<400> 309
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actcccgcca acctagaaag agagtgcatt gaagaacttt gcaattatga ggaagccaga 240
gagatttttg tggatgaaga taaaacgatt gcattttggc aggaatattc agctaaagga 300
ccaaccacaa aatcagatgg caacagagag aaaatagatg ttatgggcct tctgactgga 360
ttaattgctg ctggagtatt tttggttatt tttggattac ttggctacta tctttgtatc 420
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<210> 310
 <211> 226
 <212> PRT
 <213> Homo sapiens

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<400> 310
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Gly Phe Pro His Cys Ala Arg Gly Pro Lys Ala Ser Lys His Ala Gly
 20           25           30
Glu Glu Val Phe Thr Ser Lys Glu Glu Ala Asn Phe Phe Ile His Arg
 35           40           45
Arg Leu Leu Tyr Asn Arg Phe Asp Leu Glu Leu Phe Thr Pro Gly Asn
 50           55           60
Leu Glu Arg Glu Cys Asn Glu Glu Leu Cys Asn Tyr Glu Glu Ala Arg
 65           70           75           80
Glu Ile Phe Val Asp Glu Asp Lys Thr Ile Ala Phe Trp Gln Glu Tyr
 85           90           95
Ser Ala Lys Gly Pro Thr Thr Lys Ser Asp Gly Asn Arg Glu Lys Ile
100          105          110
Asp Val Met Gly Leu Leu Thr Gly Leu Ile Ala Ala Gly Val Phe Leu
115          120          125

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Val	Ile	Phe	Gly	Leu	Leu	Gly	Tyr	Tyr	Leu	Cys	Ile	Thr	Lys	Cys	Asn
130						135					140				
Arg	Leu	Gln	His	Pro	Cys	Ser	Ser	Ala	Val	Tyr	Glu	Arg	Gly	Arg	His
145					150					155					160
Thr	Pro	Ser	Ile	Ile	Phe	Arg	Arg	Pro	Glu	Glu	Ala	Ala	Leu	Ser	Pro
				165					170					175	
Leu	Pro	Pro	Ser	Val	Glu	Asp	Ala	Gly	Leu	Pro	Ser	Tyr	Glu	Gln	Ala
			180					185					190		
Val	Ala	Leu	Thr	Arg	Lys	His	Ser	Val	Ser	Pro	Pro	Pro	Pro	Tyr	Pro
	195						200					205			
Gly	His	Thr	Lys	Gly	Phe	Arg	Val	Phe	Lys	Lys	Ser	Met	Ser	Leu	Pro
210						215					220				
Ser	His														
225															

<210> 311
 <211> 17
 <212> PRT
 <213> Homo sapiens

<400> 311
 Met Phe Thr Leu Leu Val Leu Leu Ser Gln Leu Pro Thr Val Thr Leu
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 Gly

<210> 312
 <211> 209
 <212> PRT
 <213> Homo sapiens

<400> 312
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 20 25 30
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 35 40 45
 Glu Arg Glu Cys Asn Glu Glu Leu Cys Asn Tyr Glu Glu Ala Arg Glu
 50 55 60
 Ile Phe Val Asp Glu Asp Lys Thr Ile Ala Phe Trp Gln Glu Tyr Ser
 65 70 75 80
 Ala Lys Gly Pro Thr Thr Lys Ser Asp Gly Asn Arg Glu Lys Ile Asp
 85 90 95
 Val Met Gly Leu Leu Thr Gly Leu Ile Ala Ala Gly Val Phe Leu Val
 100 105 110
 Ile Phe Gly Leu Leu Gly Tyr Tyr Leu Cys Ile Thr Lys Cys Asn Arg
 115 120 125
 Leu Gln His Pro Cys Ser Ser Ala Val Tyr Glu Arg Gly Arg His Thr
 130 135 140
 Pro Ser Ile Ile Phe Arg Arg Pro Glu Glu Ala Ala Leu Ser Pro Leu
 145 150 155 160
 Pro Pro Ser Val Glu Asp Ala Gly Leu Pro Ser Tyr Glu Gln Ala Val
 165 170 175
 Ala Leu Thr Arg Lys His Ser Val Ser Pro Pro Pro Pro Tyr Pro Gly

			180					185				190			
His	Thr	Lys	Gly	Phe	Arg	Val	Phe	Lys	Lys	Ser	Met	Ser	Leu	Pro	Ser
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His															

<210> 313
 <211> 96
 <212> PRT
 <213> Homo sapiens

<400> 313
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 20 25 30
 Leu Leu Tyr Asn Arg Phe Asp Leu Glu Leu Phe Thr Pro Gly Asn Leu
 35 40 45
 Glu Arg Glu Cys Asn Glu Glu Leu Cys Asn Tyr Glu Glu Ala Arg Glu
 50 55 60
 Ile Phe Val Asp Glu Asp Lys Thr Ile Ala Phe Trp Gln Glu Tyr Ser
 65 70 75 80
 Ala Lys Gly Pro Thr Thr Lys Ser Asp Gly Asn Arg Glu Lys Ile Asp
 85 90 95

<210> 314
 <211> 25
 <212> PRT
 <213> Homo sapiens

<400> 314
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 Ile Phe Gly Leu Leu Gly Tyr Tyr Leu
 20 25

<210> 315
 <211> 88
 <212> PRT
 <213> Homo sapiens

<400> 315
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 Tyr Glu Arg Gly Arg His Thr Pro Ser Ile Ile Phe Arg Arg Pro Glu
 20 25 30
 Glu Ala Ala Leu Ser Pro Leu Pro Ser Val Glu Asp Ala Gly Leu
 35 40 45
 Pro Ser Tyr Glu Gln Ala Val Ala Leu Thr Arg Lys His Ser Val Ser
 50 55 60
 Pro Pro Pro Pro Tyr Pro Gly His Thr Lys Gly Phe Arg Val Phe Lys
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 Lys Ser Met Ser Leu Pro Ser His
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<210> 316

<220>

<223> Unknown

<400> 316

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<210> 317

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<223> Unknown

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<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(1432)

<223> n = A,T,C or G

<400> 324

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tgccgcgccc ggccgcgctg gggctcctgc cgcttctgct gctgctgccg cccgcgccgg 180
aggccgcaa gaagccgacg ccctgccacc ggtgccgggg gctggtggac aagtttaacc 240
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agacgtctgc caagtacgag tccagcgaga ttgcctgct ggagatcctg gaggggctgt 360
gcgagagcag cgacttcgaa tgcaatcaga tgctagaggc gcaggaggag cacctggagg 420
cctggtggct gcagctgaag agcgaatatc ctgacttatt cgagtggttt tgtgtgaaga 480
cactgaaagt gtgctgctct ccaggaaact acgggtcccg ctgtctcgca tgccagggcg 540
gatcccagag gccctgcagc gggaatggcc actgcagcgg agatgggagc agacagggcg 600
acgggtcctg ccggtgccac atgggggtacc agggcccgcg gtgcaactgac tgcattggac 660
gctacttcag ctgcctccgg aacgagacct acagcatctg cacagcctgt gacgagtcct 720
gcaagacgtg ctcgggcctg accaacagag actgcggcga gtgtgaagtg ggctgggtgc 780
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catttcttgg ttgttcttaa acagacttgt atattttgat acagttcttt gtaataaaat 1380
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<210> 325

<211> 1059

<212> DNA

<213> Homo sapiens

<400> 325

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tttaaccagg ggatggtgga caccgcaaag aagaactttg gcggcgggaa cacggcttgg 180
gaggaaaaga cgctgtccaa gtacgagtc agcgagattc gcctgctgga gatcctggag 240
gggctgtgcg agagcagcga cttcgaatgc aatcagatgc tagaggcgca ggaggagcac 300
ctggaggcct ggtggctgca gctgaagagc gaatatcctg acttattcga gtggttttgt 360
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cagggcgacg	ggtcctgccg	gtgccacatg	gggtaccagg	gcccgcgtgtg	cactgactgc	540
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gagtcctgca	agacgtgtct	gggcttgacc	aacagagact	gcggcgagtg	tgaagtgggc	660
tgggtgtctg	acgagggcgc	ctgtgtggat	gtggacgagt	gtgcggccga	gccgcctccc	720
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gacggctctg	agaaaacgga	agatgctctg	gtgccgccgg	cagaggctga	agccacagaa	1020
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Leu	Leu	Pro	Pro	Ala	Pro	Glu	Ala	Ala	Lys	Lys	Pro	Thr	Pro	Cys	His	His
			20					25					30			
Arg	Cys	Arg	Gly	Leu	Val	Asp	Lys	Phe	Asn	Gln	Gly	Met	Val	Asp	Thr	Thr
		35					40					45				
Ala	Lys	Lys	Asn	Phe	Gly	Gly	Gly	Asn	Thr	Ala	Trp		Glu	Lys	Thr	Thr
	50					55					60					
Leu	Ser	Lys	Tyr	Glu	Ser	Ser	Glu	Ile	Arg	Leu	Leu	Glu	Ile	Leu	Glu	Glu
65				70						75				80		
Gly	Leu	Cys	Glu	Ser	Ser	Asp	Phe	Glu	Cys	Asn	Gln	Met	Leu	Glu	Ala	Ala
				85					90					95		
Gln	Glu	Glu	His	Leu	Glu	Ala	Trp	Trp	Leu	Gln	Leu	Lys	Ser	Glu	Tyr	Tyr
			100					105					110			
Pro	Asp	Leu	Phe	Glu	Trp	Phe	Cys	Val	Lys	Thr	Leu	Lys	Val	Cys	Cys	Cys
		115					120					125				
Ser	Pro	Gly	Thr	Tyr	Gly	Pro	Asp	Cys	Leu	Ala	Cys	Gln	Gly	Gly	Ser	Ser
	130					135					140					
Gln	Arg	Pro	Cys	Ser	Gly	Asn	Gly	His	Cys	Ser	Gly	Asp	Gly	Ser	Arg	Arg
145				150					155					160		
Gln	Gly	Asp	Gly	Ser	Cys	Arg	Cys	His	Met	Gly	Tyr	Gln	Gly	Pro	Leu	Leu
				165					170					175		
Cys	Thr	Asp	Cys	Met	Asp	Gly	Tyr	Phe	Ser	Ser	Leu	Arg	Asn	Glu	Thr	Thr
			180					185					190			
His	Ser	Ile	Cys	Thr	Ala	Cys	Asp	Glu	Ser	Cys	Lys	Thr	Cys	Ser	Gly	Gly
	195						200					205				
Leu	Thr	Asn	Arg	Asp	Cys	Gly	Glu	Cys	Glu	Val	Gly	Trp	Val	Leu	Asp	Asp
	210					215					220					
Glu	Gly	Ala	Cys	Val	Asp	Val	Asp	Glu	Cys	Ala	Glu	Pro	Pro	Pro	Pro	Pro
225				230						235				240		
Cys	Ser	Ala	Ala	Gln	Phe	Cys	Lys	Asn	Ala	Asn	Gly	Ser	Tyr	Thr	Cys	Cys
				245					250					255		
Glu	Glu	Cys	Asp	Ser	Ser	Cys	Val	Gly	Cys	Thr	Gly	Glu	Gly	Pro	Gly	Gly
			260					265					270			
Asn	Cys	Lys	Glu	Cys	Ile	Ser	Gly	Tyr	Ala	Arg	Glu	His	Gly	Gln	Cys	Cys
		275					280					285				
Ala	Asp	Val	Asp	Glu	Cys	Ser	Leu	Ala	Glu	Lys	Thr	Cys	Val	Arg	Lys	Lys
	290					295					300					

Asn Glu Asn Cys Tyr Asn Thr Pro Gly Ser Tyr Val Cys Val Cys Pro
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 Asp Gly Phe Glu Glu Thr Glu Asp Ala Cys Val Pro Pro Ala Glu Ala
 325 330 335
 Glu Ala Thr Glu Gly Glu Ser Pro Thr Gln Leu Pro Ser Arg Glu Asp
 340 345 350
 Leu

<210> 327
 <211> 24
 <212> PRT
 <213> Homo sapiens

<400> 327
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<210> 328
 <211> 329
 <212> PRT
 <213> Homo sapiens

<400> 328
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 35 40 45
 Ile Arg Leu Leu Glu Ile Leu Glu Gly Leu Cys Glu Ser Ser Asp Phe
 50 55 60
 Glu Cys Asn Gln Met Leu Glu Ala Gln Glu Glu His Leu Glu Ala Trp
 65 70 75 80
 Trp Leu Gln Leu Lys Ser Glu Tyr Pro Asp Leu Phe Glu Trp Phe Cys
 85 90 95
 Val Lys Thr Leu Lys Val Cys Cys Ser Pro Gly Thr Tyr Gly Pro Asp
 100 105 110
 Cys Leu Ala Cys Gln Gly Gly Ser Gln Arg Pro Cys Ser Gly Asn Gly
 115 120 125
 His Cys Ser Gly Asp Gly Ser Arg Gln Gly Asp Gly Ser Cys Arg Cys
 130 135 140
 His Met Gly Tyr Gln Gly Pro Leu Cys Thr Asp Cys Met Asp Gly Tyr
 145 150 155 160
 Phe Ser Ser Leu Arg Asn Glu Thr His Ser Ile Cys Thr Ala Cys Asp
 165 170 175
 Glu Ser Cys Lys Thr Cys Ser Gly Leu Thr Asn Arg Asp Cys Gly Glu
 180 185 190
 Cys Glu Val Gly Trp Val Leu Asp Glu Gly Ala Cys Val Asp Val Asp
 195 200 205
 Glu Cys Ala Ala Glu Pro Pro Cys Ser Ala Ala Gln Phe Cys Lys
 210 215 220

Asn	Ala	Asn	Gly	Ser	Tyr	Thr	Cys	Glu	Glu	Cys	Asp	Ser	Ser	Cys	Val
225					230					235					240
Gly	Cys	Thr	Gly	Glu	Gly	Pro	Gly	Asn	Cys	Lys	Glu	Cys	Ile	Ser	Gly
			245						250					255	
Tyr	Ala	Arg	Glu	His	Gly	Gln	Cys	Ala	Asp	Val	Asp	Glu	Cys	Ser	Leu
			260					265					270		

Ala	Glu	Lys	Thr	Cys	Val	Arg	Lys	Asn	Glu	Asn	Cys	Tyr	Asn	Thr	Pro
		275					280					285			
Gly	Ser	Tyr	Val	Cys	Val	Cys	Pro	Asp	Gly	Phe	Glu	Glu	Thr	Glu	Asp
	290					295					300				
Ala	Cys	Val	Pro	Pro	Ala	Glu	Ala	Glu	Ala	Thr	Glu	Gly	Glu	Ser	Pro
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Thr	Gln	Leu	Pro	Ser	Arg	Glu	Asp	Leu							
				325											

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 <212> DNA
 <213> Homo sapiens

<400> 329

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aaaaaaaaaa	aaaaaaaaaa	gggcggccgc				2730

<210> 330
 <211> 2013
 <212> DNA
 <213> Homo sapiens

<400> 330						
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ggcgacgcgc	cactgcaggg	cgtgctcggc	ggcgccctca	ccatcccttg	ccacgtccac	180
tacctgcggc	caccgcccag	ccgcgggct	gtgctgggct	ctccgcgggt	caagtggact	240
ttcctgtccc	ggggccggga	ggcagagggt	ctgggtggcg	ggggagtgcg	cgtcaagggt	300
aacgaggcct	accggttccg	cgtggcactg	cctgcgtacc	cagcgtcgct	caccgacgtc	360
tccttggcgc	tgagcgagct	gcgccccaac	gactcaggta	tctatcgctg	tgagggtccag	420
cacggcatcg	atgacagcag	cgacgctgtg	gaggtcaagg	tcaaaggggt	cgtctttctc	480
taccgagagg	gctctgcccg	ctatgctttc	tccttttctg	gggcccagga	ggcctgtgcc	540
cgcattggag	cccacatcgc	caccccggag	cagctctatg	ccgcctacct	tgggggctat	600
gagcaatgtg	atgctggctg	gctgtcggat	cagaccgtga	ggtatcccat	ccagacccca	660
cgagaggcct	gttacggaga	catggatggc	ttccccgggg	tccggaacta	tggtgtgggtg	720
gacccggatg	acctctatga	tgtgtactgt	tatgctgaag	acctaaatgg	agaactgttc	780
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ggtgcagaga	ttgccaccac	gggccaactg	tatgcagcct	gggatgggtg	cctggaccac	900
tgcagcccag	ggtggctagc	tgatggcagt	gtgcgtacc	ccatcgtcac	acccagccag	960
cgtgtgggtg	ggggcttgcc	tggtgtcaag	actctcttcc	tcttccccaa	ccagactggc	1020
ttccccaata	agcacagccg	cttcaacgtc	tactgcttcc	gagactcggc	ccagccttct	1080
gccatccctg	aggcctccaa	cccagcctcc	aaccagcct	ctgatggact	agaggctatc	1140
gtcacagtga	cagagaccct	ggaggaactg	cagctgcctc	aggaagccac	agagagtga	1200
tcccgtaggg	ccatctactc	catccccatc	atggaggacg	gaggagggtg	aagctccact	1260
ccagaagacc	cagcagaggc	ccctaggacg	ctcctagaat	ttgaaacaca	atccatggta	1320
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gatgaagaag	agaaagagga	ggaagaagaa	gaggaggagg	tggaggatga	ggctctgtgg	1440
gcatggccca	gcgagctcag	cagcccgggc	cctgaggcct	ctctccccac	tgagccagca	1500
gcccaggaga	agtcactctc	ccaggcgcca	gcaagggcag	tcttgcagcc	tggtgcatca	1560
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gagactctgc	ccactcccag	ggagaggaac	ctagcatccc	catcaccttc	cactctggtt	1680
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cctgagggta	ccagggagct	ggaggcccc	tctgaagata	attctggaag	aactgcccc	1860
gcagggacct	cagtgcaggc	ccagccagtg	ctgccactg	acagcgccag	ccgagggtga	1920
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ctccttttct	tccccctgca	gctctgggtc	acc			2013

<210> 331
 <211> 671
 <212> PRT

<213> Homo sapiens

<400> 331

Met	Ala	Gln	Leu	Phe	Leu	Pro	Leu	Leu	Ala	Ala	Leu	Val	Leu	Ala	Gln
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			20					25					30		
Arg	Ala	Phe	Arg	Val	Arg	Ile	Ala	Gly	Asp	Ala	Pro	Leu	Gln	Gly	Val
		35				40						45			
Leu	Gly	Gly	Ala	Leu	Thr	Ile	Pro	Cys	His	Val	His	Tyr	Leu	Arg	Pro
50					55						60				
Pro	Pro	Ser	Arg	Arg	Ala	Val	Leu	Gly	Ser	Pro	Arg	Val	Lys	Trp	Thr
65				70					75					80	
Phe	Leu	Ser	Arg	Gly	Arg	Glu	Ala	Glu	Val	Leu	Val	Ala	Arg	Gly	Val
				85				90						95	
Arg	Val	Lys	Val	Asn	Glu	Ala	Tyr	Arg	Phe	Arg	Val	Ala	Leu	Pro	Ala
			100				105						110		
Tyr	Pro	Ala	Ser	Leu	Thr	Asp	Val	Ser	Leu	Ala	Leu	Ser	Glu	Leu	Arg
	115					120						125			
Pro	Asn	Asp	Ser	Gly	Ile	Tyr	Arg	Cys	Glu	Val	Gln	His	Gly	Ile	Asp
130					135						140				
Asp	Ser	Ser	Asp	Ala	Val	Glu	Val	Lys	Val	Lys	Gly	Val	Val	Phe	Leu
145				150					155						160
Tyr	Arg	Glu	Gly	Ser	Ala	Arg	Tyr	Ala	Phe	Ser	Phe	Ser	Gly	Ala	Gln
				165				170						175	
Glu	Ala	Cys	Ala	Arg	Ile	Gly	Ala	His	Ile	Ala	Thr	Pro	Glu	Gln	Leu
			180				185						190		
Tyr	Ala	Ala	Tyr	Leu	Gly	Gly	Tyr	Glu	Gln	Cys	Asp	Ala	Gly	Trp	Leu
	195					200						205			
Ser	Asp	Gln	Thr	Val	Arg	Tyr	Pro	Ile	Gln	Thr	Pro	Arg	Glu	Ala	Cys
210					215						220				
Tyr	Gly	Asp	Met	Asp	Gly	Phe	Pro	Gly	Val	Arg	Asn	Tyr	Gly	Val	Val
225				230					235					240	
Asp	Pro	Asp	Asp	Leu	Tyr	Asp	Val	Tyr	Cys	Tyr	Ala	Glu	Asp	Leu	Asn
				245				250						255	
Gly	Glu	Leu	Phe	Leu	Gly	Asp	Pro	Pro	Glu	Lys	Leu	Thr	Leu	Glu	Glu
			260				265						270		
Ala	Arg	Ala	Tyr	Cys	Gln	Glu	Arg	Gly	Ala	Glu	Ile	Ala	Thr	Thr	Gly
	275					280						285			
Gln	Leu	Tyr	Ala	Ala	Trp	Asp	Gly	Gly	Leu	Asp	His	Cys	Ser	Pro	Gly
290					295						300				
Trp	Leu	Ala	Asp	Gly	Ser	Val	Arg	Tyr	Pro	Ile	Val	Thr	Pro	Ser	Gln
305				310						315					320
Arg	Cys	Gly	Gly	Gly	Leu	Pro	Gly	Val	Lys	Thr	Leu	Phe	Leu	Phe	Pro
				325				330						335	
Asn	Gln	Thr	Gly	Phe	Pro	Asn	Lys	His	Ser	Arg	Phe	Asn	Val	Tyr	Cys
		340				345						350			
Phe	Arg	Asp	Ser	Ala	Gln	Pro	Ser	Ala	Ile	Pro	Glu	Ala	Ser	Asn	Pro
	355					360						365			
Ala	Ser	Asn	Pro	Ala	Ser	Asp	Gly	Leu	Glu	Ala	Ile	Val	Thr	Val	Thr
	370				375						380				
Glu	Thr	Leu	Glu	Glu	Leu	Gln	Leu	Pro	Gln	Glu	Ala	Thr	Glu	Ser	Glu
385				390						395					400
Ser	Arg	Gly	Ala	Ile	Tyr	Ser	Ile	Pro	Ile	Met	Glu	Asp	Gly	Gly	Gly
			405					410					415		
Gly	Ser	Ser	Thr	Pro	Glu	Asp	Pro	Ala	Glu	Ala	Pro	Arg	Thr	Leu	Leu
			420				425						430		

Glu	Phe	Glu	Thr	Gln	Ser	Met	Val	Pro	Pro	Thr	Gly	Phe	Ser	Glu	Glu
		435					440					445			
Glu	Gly	Lys	Ala	Leu	Glu	Glu	Glu	Glu	Lys	Tyr	Glu	Asp	Glu	Glu	Glu
	450					455					460				
Lys	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Val	Glu	Asp	Glu	Ala	Leu	Trp
465					470					475					480
Ala	Trp	Pro	Ser	Glu	Leu	Ser	Ser	Pro	Gly	Pro	Glu	Ala	Ser	Leu	Pro
			485						490					495	
Thr	Glu	Pro	Ala	Ala	Gln	Glu	Lys	Ser	Leu	Ser	Gln	Ala	Pro	Ala	Arg
			500					505					510		
Ala	Val	Leu	Gln	Pro	Gly	Ala	Ser	Pro	Leu	Pro	Asp	Gly	Glu	Ser	Glu
	515						520					525			
Ala	Ser	Arg	Pro	Pro	Arg	Val	His	Gly	Pro	Pro	Thr	Glu	Thr	Leu	Pro
	530					535					540				
Thr	Pro	Arg	Glu	Arg	Asn	Leu	Ala	Ser	Pro	Ser	Pro	Ser	Thr	Leu	Val
545					550					555					560
Glu	Ala	Arg	Glu	Val	Gly	Glu	Ala	Thr	Gly	Gly	Pro	Glu	Leu	Ser	Gly
			565						570					575	
Val	Pro	Arg	Gly	Glu	Ser	Glu	Glu	Thr	Gly	Ser	Ser	Glu	Gly	Ala	Pro
			580					585					590		
Ser	Leu	Leu	Pro	Ala	Thr	Arg	Ala	Pro	Glu	Gly	Thr	Arg	Glu	Leu	Glu
	595						600					605			
Ala	Pro	Ser	Glu	Asp	Asn	Ser	Gly	Arg	Thr	Ala	Pro	Ala	Gly	Thr	Ser
	610					615					620				
Val	Gln	Ala	Gln	Pro	Val	Leu	Pro	Thr	Asp	Ser	Ala	Ser	Arg	Gly	Gly
625					630					635					640
Val	Ala	Val	Val	Pro	Ala	Ser	Gly	Asn	Ser	Ala	Gln	Gly	Ser	Thr	Ala
			645						650					655	
Leu	Ser	Ile	Leu	Leu	Leu	Phe	Phe	Pro	Leu	Gln	Leu	Trp	Val	Thr	
			660					665					670		

<210> 332
 <211> 22
 <212> PRT
 <213> Homo sapiens

<400> 332
 Met Ala Gln Leu Phe Leu Pro Leu Leu Ala Ala Leu Val Leu Ala Gln
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 Ala Pro Ala Ala Leu Ala
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<210> 333
 <211> 649
 <212> PRT
 <213> Homo sapiens

<400> 333
 Asp Val Leu Glu Gly Asp Ser Ser Glu Asp Arg Ala Phe Arg Val Arg
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 Ile Ala Gly Asp Ala Pro Leu Gln Gly Val Leu Gly Gly Ala Leu Thr
 20 25 30
 Ile Pro Cys His Val His Tyr Leu Arg Pro Pro Pro Ser Arg Arg Ala
 35 40 45
 Val Leu Gly Ser Pro Arg Val Lys Trp Thr Phe Leu Ser Arg Gly Arg

50		55		60
Glu Ala Glu Val Leu Val Ala Arg Gly Val Arg Val Lys Val Asn Glu				
65		70		75
Ala Tyr Arg Phe Arg Val Ala Leu Pro Ala Tyr Pro Ala Ser Leu Thr				
		85		90
Asp Val Ser Leu Ala Leu Ser Glu Leu Arg Pro Asn Asp Ser Gly Ile				
		100		105
Tyr Arg Cys Glu Val Gln His Gly Ile Asp Asp Ser Ser Asp Ala Val				
		115		120
Glu Val Lys Val Lys Gly Val Val Phe Leu Tyr Arg Glu Gly Ser Ala				
		130		135
Arg Tyr Ala Phe Ser Phe Ser Gly Ala Gln Glu Ala Cys Ala Arg Ile				
145		150		155
Gly Ala His Ile Ala Thr Pro Glu Gln Leu Tyr Ala Ala Tyr Leu Gly				
		165		170
Gly Tyr Glu Gln Cys Asp Ala Gly Trp Leu Ser Asp Gln Thr Val Arg				
		180		185
Tyr Pro Ile Gln Thr Pro Arg Glu Ala Cys Tyr Gly Asp Met Asp Gly				
		195		200
Phe Pro Gly Val Arg Asn Tyr Gly Val Val Asp Pro Asp Asp Leu Tyr				
210		215		220
Asp Val Tyr Cys Tyr Ala Glu Asp Leu Asn Gly Glu Leu Phe Leu Gly				
225		230		235
Asp Pro Pro Glu Lys Leu Thr Leu Glu Glu Ala Arg Ala Tyr Cys Gln				
		245		250
Glu Arg Gly Ala Glu Ile Ala Thr Thr Gly Gln Leu Tyr Ala Ala Trp				
		260		265
Asp Gly Gly Leu Asp His Cys Ser Pro Gly Trp Leu Ala Asp Gly Ser				
		275		280
Val Arg Tyr Pro Ile Val Thr Pro Ser Gln Arg Cys Gly Gly Gly Leu				
290		295		300
Pro Gly Val Lys Thr Leu Phe Leu Phe Pro Asn Gln Thr Gly Phe Pro				
305		310		315
Asn Lys His Ser Arg Phe Asn Val Tyr Cys Phe Arg Asp Ser Ala Gln				
		325		330
Pro Ser Ala Ile Pro Glu Ala Ser Asn Pro Ala Ser Asn Pro Ala Ser				
		340		345
Asp Gly Leu Glu Ala Ile Val Thr Val Thr Glu Thr Leu Glu Glu Leu				
		355		360
Gln Leu Pro Gln Glu Ala Thr Glu Ser Glu Ser Arg Gly Ala Ile Tyr				
		370		375
Ser Ile Pro Ile Met Glu Asp Gly Gly Gly Gly Ser Ser Thr Pro Glu				
385		390		395
Asp Pro Ala Glu Ala Pro Arg Thr Leu Leu Glu Phe Glu Thr Gln Ser				
		405		410
Met Val Pro Pro Thr Gly Phe Ser Glu Glu Glu Gly Lys Ala Leu Glu				
		420		425
Glu Glu Glu Lys Tyr Glu Asp Glu Glu Glu Lys Glu Glu Glu Glu				
		435		440
Glu Glu Glu Val Glu Asp Glu Ala Leu Trp Ala Trp Pro Ser Glu Leu				
		450		455
Ser Ser Pro Gly Pro Glu Ala Ser Leu Pro Thr Glu Pro Ala Ala Gln				
465		470		475
Glu Lys Ser Leu Ser Gln Ala Pro Ala Arg Ala Val Leu Gln Pro Gly				
		485		490
Ala Ser Pro Leu Pro Asp Gly Glu Ser Glu Ala Ser Arg Pro Pro Arg				
		500		505
				510

Val	His	Gly	Pro	Pro	Thr	Glu	Thr	Leu	Pro	Thr	Pro	Arg	Glu	Arg	Asn
		515					520					525			
Leu	Ala	Ser	Pro	Ser	Pro	Ser	Thr	Leu	Val	Glu	Ala	Arg	Glu	Val	Gly
	530					535					540				
Glu	Ala	Thr	Gly	Gly	Pro	Glu	Leu	Ser	Gly	Val	Pro	Arg	Gly	Glu	Ser
545					550					555					560
Glu	Glu	Thr	Gly	Ser	Ser	Glu	Gly	Ala	Pro	Ser	Leu	Leu	Pro	Ala	Thr
			565					570						575	
Arg	Ala	Pro	Glu	Gly	Thr	Arg	Glu	Leu	Glu	Ala	Pro	Ser	Glu	Asp	Asn
		580					585						590		
Ser	Gly	Arg	Thr	Ala	Pro	Ala	Gly	Thr	Ser	Val	Gln	Ala	Gln	Pro	Val
	595						600					605			
Leu	Pro	Thr	Asp	Ser	Ala	Ser	Arg	Gly	Gly	Val	Ala	Val	Val	Pro	Ala
	610					615					620				
Ser	Gly	Asn	Ser	Ala	Gln	Gly	Ser	Thr	Ala	Leu	Ser	Ile	Leu	Leu	Leu
625					630					635					640
Phe	Phe	Pro	Leu	Gln	Leu	Trp	Val	Thr							
				645											

<210> 334
 <211> 456
 <212> PRT
 <213> Pigeon pea witches'-broom phytoplasma

<400> 334

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Glu	Leu	Leu	Pro	Leu	Leu	Gln	Gln	Tyr	Glu	Val	Val	Arg	Leu	Asp	Asp
			20					25					30		
Cys	Gly	Leu	Thr	Glu	Glu	His	Cys	Lys	Asp	Ile	Gly	Ser	Ala	Leu	Arg
		35					40					45			
Ala	Asn	Pro	Ser	Leu	Thr	Glu	Leu	Cys	Leu	Arg	Thr	Asn	Glu	Leu	Gly
	50					55					60				
Asp	Ala	Gly	Val	His	Leu	Val	Leu	Gln	Gly	Leu	Gln	Ser	Pro	Thr	Cys
65				70						75					80
Lys	Ile	Gln	Lys	Leu	Ser	Leu	Gln	Asn	Cys	Ser	Leu	Thr	Glu	Ala	Gly
			85					90						95	
Cys	Gly	Val	Leu	Pro	Ser	Thr	Leu	Arg	Ser	Leu	Pro	Thr	Leu	Arg	Glu
		100						105					110		
Leu	His	Leu	Ser	Asp	Asn	Pro	Leu	Gly	Asp	Ala	Gly	Leu	Arg	Leu	Leu
		115					120					125			
Cys	Glu	Gly	Leu	Leu	Asp	Pro	Gln	Cys	His	Leu	Glu	Lys	Leu	Gln	Leu
	130					135					140				
Glu	Tyr	Cys	Arg	Leu	Thr	Ala	Ala	Ser	Cys	Glu	Pro	Leu	Ala	Ser	Val
145					150					155					160
Leu	Arg	Ala	Thr	Arg	Ala	Leu	Lys	Glu	Leu	Thr	Val	Ser	Asn	Asn	Asp
			165						170					175	
Ile	Gly	Glu	Ala	Gly	Ala	Arg	Val	Leu	Gly	Gln	Gly	Leu	Ala	Asp	Ser
			180					185					190		
Ala	Cys	Gln	Leu	Glu	Thr	Leu	Arg	Leu	Glu	Asn	Cys	Gly	Leu	Thr	Pro
		195					200					205			
Ala	Asn	Cys	Lys	Asp	Leu	Cys	Gly	Ile	Val	Ala	Ser	Gln	Ala	Ser	Leu
	210					215					220				
Arg	Glu	Leu	Asp	Leu	Gly	Ser	Asn	Gly	Leu	Gly	Asp	Ala	Gly	Ile	Ala
225					230					235					240
Glu	Leu	Cys	Pro	Gly	Leu	Leu	Ser	Pro	Ala	Ser	Arg	Leu	Lys	Thr	Leu

Tyr	Ser	Ala	Thr	Leu	Asn	Asn	Phe	Leu	Gly	Thr	Glu	Pro	Val	Ile	Leu
			180					185					190		
Arg	Tyr	Met	Gly	Thr	His	His	Ser	Ile	Lys	Thr	Glu	Tyr	Leu	Ala	Phe
		195					200					205			
Trp	Leu	Asn	Glu	Pro	His	Phe	Val	Gly	Ser	Ala	Phe	Val	Pro	Glu	Ser
	210					215					220				
Val	Gly	Ser	Phe	Thr	Gly	Asp	Asp	Asp	Lys	Ile	Tyr	Phe	Phe	Phe	Ser
225					230					235					240
Glu	Arg	Ala	Val	Glu	Tyr	Asp	Cys	Tyr	Ser	Glu	Gln	Val	Val	Ala	Arg
				245					250					255	
Val	Ala	Arg	Val	Cys	Lys	Gly	Asp	Met	Gly	Gly	Ala	Arg	Thr	Leu	Gln
			260					265					270		
Lys	Lys	Trp	Thr	Thr	Phe	Leu	Lys	Ala	Arg	Leu	Val	Cys	Ser	Ala	Pro
		275					280					285			
Asp	Trp	Lys	Val	Tyr	Phe	Asn	Gln	Leu	Lys	Ala	Val	His	Thr	Leu	Arg
	290					295					300				
Gly	Ala	Ser	Trp	His	Asn	Thr	Thr	Phe	Phe	Gly	Val	Phe	Gln	Ala	Arg
305				310						315					320
Trp	Gly	Asp	Met	Asp	Leu	Ser	Ala	Val	Cys	Glu	Tyr	Gln	Leu	Glu	Gln
			325						330					335	
Ile	Gln	Gln	Val	Phe	Glu	Gly	Pro	Tyr	Lys	Glu	Tyr	Ser	Glu	Gln	Ala
			340					345					350		
Gln	Lys	Trp	Ala	Arg	Tyr	Thr	Asp	Pro	Val	Pro	Ser	Pro	Arg	Pro	Gly
		355					360					365			
Ser	Cys	Ile	Asn	Asn	Trp	His	Arg	Asp	Asn	Gly	Tyr	Thr	Ser	Ser	Leu
	370					375					380				
Glu	Leu	Pro	Asp	Asn	Thr	Leu	Asn	Phe	Ile	Lys	Lys	His	Pro	Leu	Met
385				390						395					400
Glu	Asp	Gln	Val	Lys	Pro	Arg	Leu	Gly	Arg	Pro	Leu	Leu	Val	Lys	Lys
				405					410					415	
Asn	Thr	Asn	Phe	Thr	His	Val	Val	Ala	Asp	Arg	Val	Pro	Gly	Leu	Asp
			420					425					430		
Gly	Ala	Thr	Tyr	Thr	Val	Leu	Phe	Ile	Gly	Thr	Gly	Asp	Gly	Trp	Leu
		435					440					445			
Leu	Lys	Ala	Val	Ser	Leu	Gly	Pro	Trp	Ile	His	Met	Val	Glu	Glu	Leu
	450					455					460				
Gln	Val	Phe	Asp	Gln	Glu	Pro	Val	Glu	Ser	Leu	Val	Leu	Ser	Gln	Ser
465				470						475					480
Lys	Lys	Val	Leu	Phe	Ala	Gly	Ser	Arg	Ser	Gln	Leu	Val	Gln	Leu	Ser
				485					490					495	
Leu	Ala	Asp	Cys	Thr	Lys	Tyr	Arg	Phe	Cys	Val	Asp	Cys	Val	Leu	Ala
		500						505					510		
Arg	Asp	Pro	Tyr	Cys	Ala	Trp	Asn	Val	Asn	Thr	Ser	Arg	Cys	Val	Ala
		515					520					525			
Thr	Thr	Ser	Gly	Arg	Ser	Gly	Ser	Phe	Leu	Val	Gln	His	Val	Ala	Asn
	530					535					540				
Leu	Asp	Thr	Ser	Lys	Met	Cys	Asn	Gln	Tyr	Gly	Ile	Lys	Lys	Val	Arg
545				550						555					560
Ser	Ile	Pro	Lys	Asn	Ile	Thr	Val	Val	Ser	Gly	Thr	Asp	Leu	Val	Leu
				565					570					575	
Pro	Cys	His	Leu	Ser	Ser	Asn	Leu	Ala	His	Ala	His	Trp	Thr	Phe	Gly
		580						585					590		
Ser	Gln	Asp	Leu	Pro	Ala	Glu	Gln	Pro	Gly	Ser	Phe	Leu	Tyr	Asp	Thr
		595					600					605			
Gly	Leu	Gln	Ala	Leu	Val	Val	Met	Ala	Ala	Gln	Ser	Arg	His	Ser	Gly
610						615					620				
Pro	Tyr	Arg	Cys	Tyr	Ser	Glu	Glu	Gln	Gly	Thr	Arg	Leu	Ala	Ala	Glu

625					630					635				640
Ser	Tyr	Leu	Val	Ala	Val	Val	Ala	Gly	Ser	Ser	Val	Thr	Leu	Glu
				645	Asn	Leu	Gly	Leu	Val	Trp	Leu	Ala	Val	Ala
Arg	Ala	Pro	Leu	Glu				665					670	
			660	Cys	Leu	Val	Leu	Leu	Leu	Val	Leu	Ser	Leu	Arg
Leu	Gly	Ala	Val				680				685			
Arg	Arg	Leu	Arg	Glu	Glu	Leu	Glu	Lys	Gly	Ala	Lys	Ala	Ser	Glu
	690					695				700				
Thr	Leu	Val	Tyr	Pro	Leu	Glu	Leu	Pro	Lys	Glu	Pro	Ala	Ser	Pro
705					710					715				720
Phe	Arg	Pro	Gly	Pro	Glu	Thr	Asp	Glu	Lys	Leu	Trp	Asp	Pro	Val
				725					730					735
Tyr	Tyr	Tyr	Ser	Asp	Gly	Ser	Leu	Lys	Ile	Val	Pro	Gly	His	Ala
			740					745					750	
Cys	Gln	Pro	Gly	Gly	Gly	Pro	Pro	Ser	Pro	Pro	Pro	Gly	Ile	Pro
		755					760					765		
Gln	Pro	Leu	Pro	Ser	Pro	Thr	Arg	Leu	His	Leu	Gly	Gly	Gly	Arg
	770					775					780			Asn
Ser	Asn	Ala	Asn	Gly	Tyr	Val	Arg	Leu	Gln	Leu	Gly	Gly	Glu	Asp
785					790					795				800
Gly	Gly	Ser	Gly	His	Pro	Leu	Pro	Glu	Leu	Ala	Asp	Glu	Leu	Arg
				805					810					815
Lys	Leu	Gln	Gln	Arg	Gln	Pro	Leu	Pro	Asp	Ser	Asn	Pro	Glu	Glu
			820					825					830	
Ser	Val													

<210> 336
 <211> 3503
 <212> DNA
 <213> Mus sp.

<400> 336

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<220>

<223> Unknown

<400> 337

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<210> 338

<220>

<223> Unknown

<400> 338.

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<210> 339

<211> 348

<212> PRT

<213> Cricetulus griseus

<400> 339

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20      25      30
Cys Arg Ala Leu Val Asp Lys Phe Asn Gln Gly Met Ala Asn Thr Ala
35      40      45
Arg Lys Asn Phe Gly Gly Gly Asn Thr Ala Trp Glu Glu Lys Ser Leu
50      55      60
Ser Lys Tyr Glu Phe Ser Glu Ile Arg Leu Leu Glu Ile Met Glu Gly
65      70      75      80
Leu Cys Asp Ser Asn Asp Phe Glu Cys Asn Gln Leu Leu Glu Gln His
85      90      95
Glu Glu Gln Leu Glu Ala Trp Trp Gln Thr Leu Lys Lys Glu Cys Pro
100     105     110
Asn Leu Phe Glu Trp Phe Cys Val His Thr Leu Lys Ala Cys Cys Leu
115     120     125
Pro Gly Thr Tyr Gly Pro Asp Cys Gln Glu Cys Gln Gly Gly Ser Gln
130     135     140
Arg Pro Cys Ser Gly Asn Gly His Cys Asp Gly Asp Gly Ser Arg Gln
145     150     155     160
Gly Asp Gly Ser Cys Gln Cys His Val Gly Tyr Lys Gly Pro Leu Cys
165     170     175
Ile Asp Cys Met Asp Gly Tyr Phe Ser Leu Leu Arg Asn Glu Thr His
180     185     190
Ser Phe Cys Thr Ala Cys Asp Glu Ser Cys Lys Thr Cys Ser Gly Pro
195     200     205
Thr Asn Lys Gly Cys Val Glu Cys Glu Val Gly Trp Thr Arg Val Glu
210     215     220
Asp Ala Cys Val Asp Val Asp Glu Cys Ala Ala Glu Thr Pro Pro Cys
225     230     235     240
Ser Asn Val Gln Tyr Cys Glu Asn Val Asn Gly Ser Tyr Thr Cys Glu
245     250     255
Glu Cys Asp Ser Thr Cys Val Gly Cys Thr Gly Lys Gly Pro Ala Asn
260     265     270
Cys Lys Glu Cys Ile Ser Gly Tyr Ser Lys Gln Lys Gly Glu Cys Ala
275     280     285
Asp Ile Asp Glu Cys Ser Leu Glu Thr Lys Val Cys Lys Lys Glu Asn
290     295     300
Glu Asn Cys Tyr Asn Thr Pro Gly Ser Phe Val Cys Val Cys Pro Glu
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Gly Phe Glu Glu Asp Arg Arg Cys Leu Cys Thr Asp Ser Arg Arg Arg
325     330     335
Ser Gly Arg Gly Lys Ser His Thr Ala Thr Leu Pro
340     345
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<210> 340

<211> 1399

<212> DNA

<213> Cricetulus griseus

<400> 340

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<210> 341
<211> 528
<212> PRT
<213> Homo sapiens

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35 40 45
Leu Gly Gly Ala Leu Thr Ile Pro Cys His Val His Tyr Leu Arg Pro
50 55 60
Pro Pro Ser Arg Arg Ala Val Leu Gly Ser Pro Arg Val Lys Trp Thr
65 70 75 80
Phe Leu Ser Arg Gly Arg Glu Ala Glu Val Leu Val Ala Arg Gly Val
85 90 95
Arg Val Lys Val Asn Glu Ala Tyr Arg Phe Arg Val Ala Leu Pro Ala
100 105 110
Tyr Pro Ala Ser Leu Thr Asp Val Ser Leu Ala Leu Ser Glu Leu Arg
115 120 125
Pro Asn Asp Ser Gly Ile Tyr Arg Cys Glu Val Gln His Gly Ile Asp
130 135 140
Asp Ser Ser Asp Ala Val Glu Ser Ser Gln Arg Tyr Pro Ile Gln Thr
145 150 155 160
Pro Arg Glu Ala Cys Tyr Gly Asp Met Asp Gly Phe Pro Gly Val Arg
165 170 175
Asn Tyr Gly Val Val Asp Pro Asp Asp Leu Tyr Asp Val Tyr Cys Tyr
180 185 190
Ala Glu Asp Leu Asn Gly Glu Leu Phe Leu Gly Asp Pro Pro Glu Lys
195 200 205
Leu Thr Leu Glu Glu Ala Arg Ala Tyr Cys Gln Glu Arg Gly Ala Glu
210 215 220

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Ile	Ala	Thr	Thr	Gly	Gln	Leu	Tyr	Ala	Ala	Trp	Asp	Gly	Gly	Leu	Asp	225	230	235	240
His	Cys	Ser	Pro	Gly	Trp	Leu	Ala	Asp	Gly	Ser	Val	Arg	Tyr	Pro	Ile	245	250	255	
Val	Thr	Pro	Ser	Gln	Arg	Cys	Gly	Gly	Gly	Leu	Pro	Gly	Val	Lys	Thr	260	265	270	
Leu	Phe	Leu	Phe	Pro	Asn	Gln	Thr	Gly	Phe	Pro	Asn	Lys	His	Ser	Arg	275	280	285	
Phe	Asn	Val	Tyr	Cys	Phe	Arg	Asp	Ser	Ala	Gln	Leu	Leu	Pro	Ser	Leu	290	295	300	
Arg	Pro	Pro	Thr	Gln	Pro	Pro	Thr	Gln	Leu	Asp	Gly	Leu	Glu	Ala	Ile	305	310	315	320
Val	Thr	Val	Thr	Glu	Thr	Leu	Glu	Glu	Leu	Gln	Leu	Pro	Gln	Glu	Ala	325	330	335	
Thr	Glu	Ser	Glu	Ser	Arg	Gly	Ala	Ile	Tyr	Ser	Ile	Pro	Ile	Met	Glu	340	345	350	
Asp	Gly	Gly	Gly	Gly	Ser	Ser	Thr	Pro	Glu	Asp	Pro	Ala	Glu	Ala	Pro	355	360	365	
Arg	Thr	Leu	Leu	Glu	Phe	Glu	Thr	Gln	Ser	Met	Val	Pro	Pro	Thr	Gly	370	375	380	
Phe	Ser	Glu	Glu	Glu	Gly	Lys	Ala	Leu	Glu	Glu	Glu	Glu	Lys	Tyr	Glu	385	390	395	400
Asp	Glu	Glu	Glu	Lys	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Val	Glu	Asp	405	410	415	
Glu	Ala	Leu	Trp	Ala	Trp	Pro	Ser	Glu	Leu	Ser	Ser	Pro	Gly	Pro	Glu	420	425	430	
Ala	Ser	Leu	Pro	Thr	Glu	Pro	Ala	Ala	Gln	Glu	Glu	Ser	Leu	Ser	Gln	435	440	445	
Ala	Pro	Ala	Arg	Ala	Val	Leu	Gln	Pro	Gly	Ala	Ser	Pro	Leu	Pro	Asp	450	455	460	
Gly	Glu	Ser	Glu	Ala	Ser	Arg	Pro	Pro	Arg	Val	His	Gly	Pro	Pro	Thr	465	470	475	480
Glu	Thr	Leu	Pro	Thr	Pro	Arg	Glu	Arg	Asn	Leu	Ala	Ser	Pro	Ser	Pro	485	490	495	
Ser	Thr	Leu	Val	Glu	Ala	Arg	Glu	Val	Gly	Glu	Ala	Thr	Gly	Gly	Pro	500	505	510	
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<210> 342
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 <212> PRT
 <213> Mus sp.

<400> 342
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 35 40 45
 Gly Gly Ala Leu Ala Ile Pro Cys His Val His His Leu Arg Pro Pro
 50 55 60
 Arg Ser Arg Arg Ala Ala Pro Gly Phe Pro Arg Val Lys Trp Thr Phe
 65 70 75 80
 Leu Ser Gly Asp Arg Glu Val Glu Val Leu Val Ala Arg Gly Leu Arg

Gly Ser Pro Glu Leu Ser Gly Val Pro Arg Glu Ser Glu Glu Ala Gly
 545 550 555 560
 Ser Ser Ser Leu Glu Asp Gly Pro Ser Leu Leu Pro Ala Thr Trp Ala
 565 570 575
 Pro Val Gly Pro Arg Glu Leu Glu Thr Pro Ser Glu Glu Lys Ser Gly
 580 585 590
 Arg Thr Val Leu Ala Gly Thr Ser Val Gln Ala Gln Pro Val Leu Pro
 595 600 605
 Thr Asp Ser Ala Ser His Gly Gly Val Ala Val Ala Pro Ser Ser Gly
 610 615 620
 Asp Cys Ile Pro Ser Pro Cys His Asn Gly Gly Thr Cys Leu Glu Glu
 625 630 635 640
 Lys Glu Gly Phe Arg Cys Leu Cys Leu Pro Gly Tyr Gly Gly Asp Leu
 645 650 655
 Cys Asp Val Gly Leu His Phe Cys Ser Pro Gly Trp Glu Ala Phe Gln
 660 665 670
 Gly Ala Cys Tyr Lys His Phe Ser Thr Arg Arg Ser Trp Glu Glu Ala
 675 680 685
 Glu Ser Gln Cys Arg Ala Leu Gly Ala His Leu Thr Ser Ile Cys Thr
 690 695 700
 Pro Glu Glu Gln Asp Phe Val Asn Asp Arg Tyr Arg Glu Tyr Gln Trp
 705 710 715 720
 Ile Gly Leu Asn Asp Arg Thr Ile Glu Gly Asp Phe Leu Trp Ser Asp
 725 730 735
 Gly Ala Pro Leu Leu Tyr Glu Asn Trp Asn Pro Gly Gln Pro Asp Ser
 740 745 750
 Tyr Phe Leu Ser Gly Glu Asn Cys Val Val Met Val Trp His Asp Gln
 755 760 765
 Gly Gln Trp Ser Asp Val Pro Cys Asn Tyr His Leu Ser Tyr Thr Cys
 770 775 780
 Lys Met Gly Leu Val Ser Cys Gly Pro Pro Pro Gln Leu Pro Leu Ala
 785 790 795 800
 Gln Ile Phe Gly Arg Pro Arg Leu Arg Tyr Ala Val Asp Thr Val Leu
 805 810 815
 Arg Tyr Arg Cys Arg Asp Gly Leu Ala Gln Arg Asn Leu Pro Leu Ile
 820 825 830
 Arg Cys Gln Glu Asn Gly Leu Trp Glu Ala Pro Gln Ile Ser Cys Val
 835 840 845
 Pro Arg Arg Pro Gly Arg Ala Leu Arg Ser Met Asp Ala Pro Glu Gly
 850 855 860
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 865 870 875 880
 Ser Ser Leu

<210> 343
 <211> 3153
 <212> DNA
 <213> Mus sp.

<220>
 <221> misc_feature
 <222> (1)...(3153)
 <223> n = A,T,C or G

<400> 343

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gctattcgat	cttgattgtc	gaagagtttt	taggatggag	taccagcaaa	accaggtgga	3120
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<223> Unknown

<400> 344
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<400> 350
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<210> 351
<211> 2002
<212> DNA
<213> Gerbil

<400> 351

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agaaggagtc	tttgcacaa	aaaaagcagc	aagcatcttt	atgcaccgtc	gcctcctata	240
caatagattt	gatttagaac	tcttcactcc	cggaacctg	gagagagagt	gctatgagga	300
gttctgtagt	tatgaagaag	ccagagagat	cctcggggac	aacgaagaaa	tgatcacatt	360
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cttacttggt	tactatctgt	gtatcaccaa	gtgtaatagg	cagccatatc	aaggttcttc	540
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aaaaaaaaaa	aagggcggcc	gc				2002

<210> 352
 <211> 675
 <212> DNA
 <213> Gerbil

<400> 352

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cccgggaacc	tggagagaga	gtgctatgag	gagttctgta	gttatgaaga	agccagagag	240
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<210> 353

<211> 225
 <212> PRT
 <213> Gerbil

<400> 353

Met	Phe	Leu	Leu	Leu	Val	Val	Leu	Ser	Gln	Leu	Pro	Arg	Leu	Thr	Leu
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Ala	Val	Pro	His	Thr	Arg	Ser	Leu	Lys	Asn	Ser	Glu	His	Ala	Pro	Glu
			20					25					30		
Gly	Val	Phe	Ala	Ser	Lys	Lys	Ala	Ala	Ser	Ile	Phe	Met	His	Arg	Arg
		35					40					45			
Leu	Leu	Tyr	Asn	Arg	Phe	Asp	Leu	Glu	Leu	Phe	Thr	Pro	Gly	Asn	Leu
	50					55				60					
Glu	Arg	Glu	Cys	Tyr	Glu	Glu	Phe	Cys	Ser	Tyr	Glu	Glu	Ala	Arg	Glu
65					70					75					80
Ile	Leu	Gly	Asp	Asn	Glu	Glu	Met	Ile	Thr	Phe	Trp	Arg	Glu	Tyr	Ser
				85					90					95	
Val	Lys	Gly	Pro	Thr	Thr	Arg	Ser	Asp	Val	Asn	Lys	Glu	Lys	Ile	Asp
			100					105					110		
Val	Met	Gly	Leu	Leu	Thr	Gly	Leu	Ile	Ala	Ala	Gly	Val	Phe	Leu	Val
	115						120					125			
Val	Phe	Gly	Leu	Leu	Gly	Tyr	Tyr	Leu	Cys	Ile	Thr	Lys	Cys	Asn	Arg
	130					135					140				
Gln	Pro	Tyr	Gln	Gly	Ser	Ser	Ala	Val	Tyr	Thr	Arg	Arg	Thr	Arg	His
145					150					155					160
Thr	Pro	Ser	Ile	Ile	Phe	Arg	Thr	His	Glu	Glu	Ala	Val	Leu	Ser	Pro
				165					170					175	
Ser	Ser	Ser	Ser	Glu	Asp	Ala	Gly	Leu	Pro	Ser	Tyr	Glu	Gln	Ala	Val
			180				185						190		
Ala	Leu	Thr	Arg	Lys	His	Ser	Val	Ser	Pro	Pro	Pro	Pro	Tyr	Pro	Gly
	195						200					205			
Pro	Ala	Lys	Gly	Phe	Arg	Val	Phe	Lys	Lys	Ser	Met	Ser	Leu	Pro	Ser
	210					215					220				

His
 225

<210> 354
 <211> 17
 <212> PRT
 <213> Gerbil

<400> 354

Met	Phe	Leu	Leu	Leu	Val	Val	Leu	Ser	Gln	Leu	Pro	Arg	Leu	Thr	Leu
1				5					10					15	
Ala															

<210> 355
 <211> 208
 <212> PRT
 <213> Gerbil

<400> 355

Val	Pro	His	Thr	Arg	Ser	Leu	Lys	Asn	Ser	Glu	His	Ala	Pro	Glu	Gly
1				5					10					15	

Val	Phe	Ala	Ser	Lys	Lys	Ala	Ala	Ser	Ile	Phe	Met	His	Arg	Arg	Leu
			20					25					30		
Leu	Tyr	Asn	Arg	Phe	Asp	Leu	Glu	Leu	Phe	Thr	Pro	Gly	Asn	Leu	Glu
		35					40					45			
Arg	Glu	Cys	Tyr	Glu	Glu	Phe	Cys	Ser	Tyr	Glu	Glu	Ala	Arg	Glu	Ile
	50					55				60					
Leu	Gly	Asp	Asn	Glu	Glu	Met	Ile	Thr	Phe	Trp	Arg	Glu	Tyr	Ser	Val
65				70					75						80
Lys	Gly	Pro	Thr	Thr	Arg	Ser	Asp	Val	Asn	Lys	Glu	Lys	Ile	Asp	Val
			85					90					95		
Met	Gly	Leu	Leu	Thr	Gly	Leu	Ile	Ala	Ala	Gly	Val	Phe	Leu	Val	Val
		100						105					110		
Phe	Gly	Leu	Leu	Gly	Tyr	Tyr	Leu	Cys	Ile	Thr	Lys	Cys	Asn	Arg	Gln
	115						120					125			
Pro	Tyr	Gln	Gly	Ser	Ser	Ala	Val	Tyr	Thr	Arg	Arg	Thr	Arg	His	Thr
	130					135					140				
Pro	Ser	Ile	Ile	Phe	Arg	Thr	His	Glu	Glu	Ala	Val	Leu	Ser	Pro	Ser
145					150					155					160
Ser	Ser	Ser	Glu	Asp	Ala	Gly	Leu	Pro	Ser	Tyr	Glu	Gln	Ala	Val	Ala
			165					170						175	
Leu	Thr	Arg	Lys	His	Ser	Val	Ser	Pro	Pro	Pro	Pro	Tyr	Pro	Gly	Pro
		180						185					190		
Ala	Lys	Gly	Phe	Arg	Val	Phe	Lys	Lys	Ser	Met	Ser	Leu	Pro	Ser	His
	195						200					205			

<210> 356
 <211> 95
 <212> PRT
 <213> Gerbil

<400> 356

Val	Pro	His	Thr	Arg	Ser	Leu	Lys	Asn	Ser	Glu	His	Ala	Pro	Glu	Gly
1				5					10					15	
Val	Phe	Ala	Ser	Lys	Lys	Ala	Ala	Ser	Ile	Phe	Met	His	Arg	Arg	Leu
		20						25					30		
Leu	Tyr	Asn	Arg	Phe	Asp	Leu	Glu	Leu	Phe	Thr	Pro	Gly	Asn	Leu	Glu
	35						40					45			
Arg	Glu	Cys	Tyr	Glu	Glu	Phe	Cys	Ser	Tyr	Glu	Glu	Ala	Arg	Glu	Ile
	50					55				60					
Leu	Gly	Asp	Asn	Glu	Glu	Met	Ile	Thr	Phe	Trp	Arg	Glu	Tyr	Ser	Val
65				70					75						80
Lys	Gly	Pro	Thr	Thr	Arg	Ser	Asp	Val	Asn	Lys	Glu	Lys	Ile	Asp	
			85					90					95		

<210> 357
 <211> 25
 <212> PRT
 <213> Gerbil

<400> 357

Val	Met	Gly	Leu	Leu	Thr	Gly	Leu	Ile	Ala	Ala	Gly	Val	Phe	Leu	Val
1				5					10					15	
Val	Phe	Gly	Leu	Leu	Gly	Tyr	Tyr	Leu							
		20						25							

<210> 358
 <211> 88
 <212> PRT
 <213> Gerbil

<400> 358
 Cys Ile Thr Lys Cys Asn Arg Gln Pro Tyr Gln Gly Ser Ser Ala Val
 1 5 10 15
 Tyr Thr Arg Arg Thr Arg His Thr Pro Ser Ile Ile Phe Arg Thr His
 20 25 30
 Glu Glu Ala Val Leu Ser Pro Ser Ser Ser Glu Asp Ala Gly Leu
 35 40 45
 Pro Ser Tyr Glu Gln Ala Val Ala Leu Thr Arg Lys His Ser Val Ser
 50 55 60
 Pro Pro Pro Pro Tyr Pro Gly Pro Ala Lys Gly Phe Arg Val Phe Lys
 65 70 75 80
 Lys Ser Met Ser Leu Pro Ser His
 85

<210> 359

<220>
 <223> Unknown

<400> 359
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<210> 360

<220>
 <223> Unknown

<400> 360
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<210> 361

<220>
 <223> Unknown

<400> 361
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<210> 362
 <211> 962
 <212> DNA
 <213> Mus sp.

<400> 362
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 aagaacaggc tctacctgca caacaacccg ctgccctgtg actgcagcct ctaccacctg 180
 ctccggcgct ggcaccagcg gggcctgagt gccctgcatg attttgaacg cgagtacaca 240
 tgcttggtct ttaaggtgtc agagtcccga gtgcgctttt ttgagcacag ccgggtcttc 300
 aagaactgct ctgtggctgc agctccaggc ttagagctgc ctgaagagca gctgcacgcg 360

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caggtggggcc agtccctgag gctcttctgc aacaccagtg tgcctgccac tcgggtggcc 420
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gtgcaaaagg ctgccccga gccagagact ttcaacacag gctttaccac cctgctgggc 660
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tgtactgct gtcagcgggc ctgccgcaac cgttgctggc cccgggcatc cagtccactc 780
caggagctga gcgcacagtc ctccatgctt agcactacgc caccagatgc acccagccgc 840
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cgtgtgcagc tcgcagtacc tccagactcc gatctgtgca accccatggg cttgcaactc 960
aa

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<210> 363
 <211> 320
 <212> PRT
 <213> Mus sp.

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<400> 363
Pro Phe Leu Phe Asn His Leu His Gly Leu Gly Leu Thr Arg Leu Arg
 1          5          10          15
Thr Leu Asp Leu Ser Ser Asn Trp Leu Lys His Ile Ser Ile Pro Glu
 20          25          30
Leu Ala Ala Leu Pro Thr Tyr Leu Lys Asn Arg Leu Tyr Leu His Asn
 35          40          45
Asn Pro Leu Pro Cys Asp Cys Ser Leu Tyr His Leu Leu Arg Arg Trp
 50          55          60
His Gln Arg Gly Leu Ser Ala Leu His Asp Phe Glu Arg Glu Tyr Thr
 65          70          75          80
Cys Leu Val Phe Lys Val Ser Glu Ser Arg Val Arg Phe Phe Glu His
 85          90          95
Ser Arg Val Phe Lys Asn Cys Ser Val Ala Ala Ala Pro Gly Leu Glu
100          105          110
Leu Pro Glu Glu Gln Leu His Ala Gln Val Gly Gln Ser Leu Arg Leu
115          120          125
Phe Cys Asn Thr Ser Val Pro Ala Thr Arg Val Ala Trp Val Ser Pro
130          135          140
Lys Asn Glu Leu Leu Val Ala Pro Ala Ser Gln Asp Gly Ser Ile Ala
145          150          155          160
Val Leu Ala Asp Gly Ser Leu Ala Ile Gly Arg Val Gln Glu Gln His
165          170          175
Ala Gly Val Phe Val Cys Leu Ala Ser Gly Pro Arg Leu His His Asn
180          185          190
Gln Thr Leu Glu Tyr Asn Val Ser Val Gln Lys Ala Arg Pro Glu Pro
195          200          205
Glu Thr Phe Asn Thr Gly Phe Thr Thr Leu Leu Gly Cys Ile Val Gly
210          215          220
Leu Val Leu Val Leu Leu Tyr Leu Phe Ala Pro Pro Cys Arg Gly Cys
225          230          235          240
Cys His Cys Cys Gln Arg Ala Cys Arg Asn Arg Cys Trp Pro Arg Ala
245          250          255
Ser Ser Pro Leu Gln Glu Leu Ser Ala Gln Ser Ser Met Leu Ser Thr
260          265          270
Thr Pro Pro Asp Ala Pro Ser Arg Lys Ala Ser Val His Lys His Val
275          280          285
Val Phe Leu Glu Pro Gly Lys Lys Gly Leu Asn Gly Arg Val Gln Leu
290          295          300
Ala Val Pro Pro Asp Ser Asp Leu Cys Asn Pro Met Gly Leu Gln Leu

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305

310

315

320

<210> 364
 <211> 16
 <212> PRT
 <213> Mus sp.

<400> 364
 Pro Phe Leu Phe Asn His Leu His Gly Leu Gly Leu Thr Arg Leu Arg
 1 5 10 15

<210> 365
 <211> 304
 <212> PRT
 <213> Mus sp.

<400> 365
 Thr Leu Asp Leu Ser Ser Asn Trp Leu Lys His Ile Ser Ile Pro Glu
 1 5 10 15
 Leu Ala Ala Leu Pro Thr Tyr Leu Lys Asn Arg Leu Tyr Leu His Asn
 20 25 30
 Asn Pro Leu Pro Cys Asp Cys Ser Leu Tyr His Leu Leu Arg Arg Trp
 35 40 45
 His Gln Arg Gly Leu Ser Ala Leu His Asp Phe Glu Arg Glu Tyr Thr
 50 55 60
 Cys Leu Val Phe Lys Val Ser Glu Ser Arg Val Arg Phe Phe Glu His
 65 70 75 80
 Ser Arg Val Phe Lys Asn Cys Ser Val Ala Ala Ala Pro Gly Leu Glu
 85 90 95
 Leu Pro Glu Glu Gln Leu His Ala Gln Val Gly Gln Ser Leu Arg Leu
 100 105 110
 Phe Cys Asn Thr Ser Val Pro Ala Thr Arg Val Ala Trp Val Ser Pro
 115 120 125
 Lys Asn Glu Leu Leu Val Ala Pro Ala Ser Gln Asp Gly Ser Ile Ala
 130 135 140
 Val Leu Ala Asp Gly Ser Leu Ala Ile Gly Arg Val Gln Glu Gln His
 145 150 155 160
 Ala Gly Val Phe Val Cys Leu Ala Ser Gly Pro Arg Leu His His Asn
 165 170 175
 Gln Thr Leu Glu Tyr Asn Val Ser Val Gln Lys Ala Arg Pro Glu Pro
 180 185 190
 Glu Thr Phe Asn Thr Gly Phe Thr Thr Leu Leu Gly Cys Ile Val Gly
 195 200 205
 Leu Val Leu Val Leu Leu Tyr Leu Phe Ala Pro Pro Cys Arg Gly Cys
 210 215 220
 Cys His Cys Cys Gln Arg Ala Cys Arg Asn Arg Cys Trp Pro Arg Ala
 225 230 235 240
 Ser Ser Pro Leu Gln Glu Leu Ser Ala Gln Ser Ser Met Leu Ser Thr
 245 250 255
 Thr Pro Pro Asp Ala Pro Ser Arg Lys Ala Ser Val His Lys His Val
 260 265 270
 Val Phe Leu Glu Pro Gly Lys Lys Gly Leu Asn Gly Arg Val Gln Leu
 275 280 285
 Ala Val Pro Pro Asp Ser Asp Leu Cys Asn Pro Met Gly Leu Gln Leu
 290 295 300

<210> 366
 <211> 197
 <212> PRT
 <213> Mus sp.

<400> 366
 Thr Leu Asp Leu Ser Ser Asn Trp Leu Lys His Ile Ser Ile Pro Glu
 1 5 10 15
 Leu Ala Ala Leu Pro Thr Tyr Leu Lys Asn Arg Leu Tyr Leu His Asn
 20 25 30
 Asn Pro Leu Pro Cys Asp Cys Ser Leu Tyr His Leu Leu Arg Arg Trp
 35 40 45
 His Gln Arg Gly Leu Ser Ala Leu His Asp Phe Glu Arg Glu Tyr Thr
 50 55 60
 Cys Leu Val Phe Lys Val Ser Glu Ser Arg Val Arg Phe Phe Glu His
 65 70 75 80
 Ser Arg Val Phe Lys Asn Cys Ser Val Ala Ala Ala Pro Gly Leu Glu
 85 90 95
 Leu Pro Glu Glu Gln Leu His Ala Gln Val Gly Gln Ser Leu Arg Leu
 100 105 110
 Phe Cys Asn Thr Ser Val Pro Ala Thr Arg Val Ala Trp Val Ser Pro
 115 120 125
 Lys Asn Glu Leu Leu Val Ala Pro Ala Ser Gln Asp Gly Ser Ile Ala
 130 135 140
 Val Leu Ala Asp Gly Ser Leu Ala Ile Gly Arg Val Gln Glu Gln His
 145 150 155 160
 Ala Gly Val Phe Val Cys Leu Ala Ser Gly Pro Arg Leu His His Asn
 165 170 175
 Gln Thr Leu Glu Tyr Asn Val Ser Val Gln Lys Ala Arg Pro Glu Pro
 180 185 190
 Glu Thr Phe Asn Thr
 195

<210> 367
 <211> 20
 <212> PRT
 <213> Mus sp.

<400> 367
 Gly Phe Thr Thr Leu Leu Gly Cys Ile Val Gly Leu Val Leu Val Leu
 1 5 10 15
 Leu Tyr Leu Phe
 20

<210> 368
 <211> 87
 <212> PRT
 <213> Mus sp.

<400> 368
 Ala Pro Pro Cys Arg Gly Cys Cys His Cys Cys Gln Arg Ala Cys Arg
 1 5 10 15
 Asn Arg Cys Trp Pro Arg Ala Ser Ser Pro Leu Gln Glu Leu Ser Ala


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<210> 372
 <211> 1425
 <212> DNA
 <213> Homo sapiens

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<400> 372
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<210> 373
 <211> 475
 <212> PRT
 <213> Homo sapiens

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<400> 373
Met Ala Pro Pro Ala Ala Arg Leu Ala Leu Leu Ser Ala Ala Ala Leu
 1             5             10             15
Thr Leu Ala Ala Arg Pro Ala Pro Ser Pro Gly Leu Gly Pro Gly Pro
      20             25             30
Glu Cys Phe Thr Ala Asn Gly Ala Asp Tyr Arg Gly Thr Gln Asn Trp
      35             40             45
Thr Ala Leu Gln Gly Gly Lys Pro Cys Leu Phe Trp Asn Glu Thr Phe
      50             55             60
Gln His Pro Tyr Asn Thr Leu Lys Tyr Pro Asn Gly Glu Gly Gly Leu

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65					70					75					80
Gly	Glu	His	Asn	Tyr	Cys	Arg	Asn	Pro	Asp	Gly	Asp	Val	Ser	Pro	Trp
				85					90					95	
Cys	Tyr	Val	Ala	Glu	His	Glu	Asp	Gly	Val	Tyr	Trp	Lys	Tyr	Cys	Glu
			100					105					110		
Ile	Pro	Ala	Cys	Gln	Met	Pro	Gly	Asn	Leu	Gly	Cys	Tyr	Lys	Asp	His
		115					120					125			
Gly	Asn	Pro	Pro	Pro	Leu	Thr	Gly	Thr	Ser	Lys	Thr	Ser	Asn	Lys	Leu
	130					135					140				
Thr	Ile	Gln	Thr	Cys	Ile	Ser	Phe	Cys	Arg	Ser	Gln	Arg	Phe	Lys	Phe
145					150					155					160
Ala	Gly	Met	Glu	Ser	Gly	Tyr	Ala	Cys	Phe	Cys	Gly	Asn	Asn	Pro	Asp
				165					170					175	
Tyr	Trp	Lys	Tyr	Gly	Glu	Ala	Ala	Ser	Thr	Glu	Cys	Asn	Ser	Val	Cys
			180					185					190		
Phe	Gly	Asp	His	Thr	Gln	Pro	Cys	Gly	Gly	Asp	Gly	Arg	Ile	Ile	Leu
	195						200					205			
Phe	Asp	Thr	Leu	Val	Gly	Ala	Cys	Gly	Gly	Asn	Tyr	Ser	Ala	Met	Ser
	210					215					220				
Ser	Val	Val	Tyr	Ser	Pro	Asp	Phe	Pro	Asp	Thr	Tyr	Ala	Thr	Gly	Arg
225					230					235					240
Val	Cys	Tyr	Trp	Thr	Ile	Arg	Val	Pro	Gly	Ala	Ser	His	Ile	His	Phe
				245					250					255	
Ser	Phe	Pro	Leu	Phe	Asp	Ile	Arg	Asp	Ser	Ala	Asp	Met	Val	Glu	Leu
			260					265					270		
Leu	Asp	Gly	Tyr	Thr	His	Arg	Val	Leu	Ala	Arg	Phe	His	Gly	Arg	Ser
	275						280					285			
Arg	Pro	Pro	Leu	Ser	Phe	Asn	Val	Ser	Leu	Asp	Phe	Val	Ile	Leu	Tyr
	290					295					300				
Phe	Phe	Ser	Asp	Arg	Ile	Asn	Gln	Ala	Gln	Gly	Phe	Ala	Val	Leu	Tyr
305					310					315					320
Gln	Ala	Val	Lys	Glu	Glu	Leu	Pro	Gln	Glu	Arg	Pro	Ala	Val	Asn	Gln
				325					330					335	
Thr	Val	Ala	Glu	Val	Ile	Thr	Glu	Gln	Ala	Asn	Leu	Ser	Val	Ser	Ala
			340					345					350		
Ala	Arg	Ser	Ser	Lys	Val	Leu	Tyr	Val	Ile	Thr	Thr	Ser	Pro	Ser	His
			355					360					365		
Pro	Pro	Gln	Thr	Val	Pro	Gly	Ser	Asn	Ser	Trp	Ala	Pro	Pro	Met	Gly
	370					375					380				
Ala	Gly	Ser	His	Arg	Val	Glu	Gly	Trp	Thr	Val	Tyr	Gly	Leu	Ala	Thr
385					390					395					400
Leu	Leu	Ile	Leu	Thr	Val	Thr	Ala	Ile	Val	Ala	Lys	Ile	Leu	Leu	His
			405						410					415	
Val	Thr	Phe	Lys	Ser	His	Arg	Val	Pro	Ala	Ser	Gly	Asp	Leu	Arg	Asp
			420					425					430		
Cys	His	Gln	Pro	Gly	Thr	Ser	Gly	Glu	Ile	Trp	Ser	Ile	Phe	Tyr	Lys
	435						440					445			
Pro	Ser	Thr	Ser	Ile	Ser	Ile	Phe	Lys	Lys	Lys	Leu	Lys	Gly	Gln	Ser
	450					455					460				
Gln	Gln	Asp	Asp	Arg	Asn	Pro	Leu	Val	Ser	Asp					
465					470					475					

<210> 374
 <211> 19
 <212> PRT
 <213> Homo sapiens

<400> 374

Met Ala Pro Pro Ala Ala Arg Leu Ala Leu Leu Ser Ala Ala Ala Leu
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 Thr Leu Ala

<210> 375

<211> 456

<212> PRT

<213> Homo sapiens

<400> 375

Ala Arg Pro Ala Pro Ser Pro Gly Leu Gly Pro Gly Pro Glu Cys Phe
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 Thr Ala Asn Gly Ala Asp Tyr Arg Gly Thr Gln Asn Trp Thr Ala Leu
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 Gln Gly Gly Lys Pro Cys Leu Phe Trp Asn Glu Thr Phe Gln His Pro
 35 40 45
 Tyr Asn Thr Leu Lys Tyr Pro Asn Gly Glu Gly Gly Leu Gly Glu His
 50 55 60
 Asn Tyr Cys Arg Asn Pro Asp Gly Asp Val Ser Pro Trp Cys Tyr Val
 65 70 75 80
 Ala Glu His Glu Asp Gly Val Tyr Trp Lys Tyr Cys Glu Ile Pro Ala
 85 90 95
 Cys Gln Met Pro Gly Asn Leu Gly Cys Tyr Lys Asp His Gly Asn Pro
 100 105 110
 Pro Pro Leu Thr Gly Thr Ser Lys Thr Ser Asn Lys Leu Thr Ile Gln
 115 120 125
 Thr Cys Ile Ser Phe Cys Arg Ser Gln Arg Phe Lys Phe Ala Gly Met
 130 135 140
 Glu Ser Gly Tyr Ala Cys Phe Cys Gly Asn Asn Pro Asp Tyr Trp Lys
 145 150 155 160
 Tyr Gly Glu Ala Ala Ser Thr Glu Cys Asn Ser Val Cys Phe Gly Asp
 165 170 175
 His Thr Gln Pro Cys Gly Gly Asp Gly Arg Ile Ile Leu Phe Asp Thr
 180 185 190
 Leu Val Gly Ala Cys Gly Gly Asn Tyr Ser Ala Met Ser Ser Val Val
 195 200 205
 Tyr Ser Pro Asp Phe Pro Asp Thr Tyr Ala Thr Gly Arg Val Cys Tyr
 210 215 220
 Trp Thr Ile Arg Val Pro Gly Ala Ser His Ile His Phe Ser Phe Pro
 225 230 235 240
 Leu Phe Asp Ile Arg Asp Ser Ala Asp Met Val Glu Leu Leu Asp Gly
 245 250 255
 Tyr Thr His Arg Val Leu Ala Arg Phe His Gly Arg Ser Arg Pro Pro
 260 265 270
 Leu Ser Phe Asn Val Ser Leu Asp Phe Val Ile Leu Tyr Phe Phe Ser
 275 280 285
 Asp Arg Ile Asn Gln Ala Gln Gly Phe Ala Val Leu Tyr Gln Ala Val
 290 295 300
 Lys Glu Glu Leu Pro Gln Glu Arg Pro Ala Val Asn Gln Thr Val Ala
 305 310 315 320
 Glu Val Ile Thr Glu Gln Ala Asn Leu Ser Val Ser Ala Ala Arg Ser
 325 330 335
 Ser Lys Val Leu Tyr Val Ile Thr Thr Ser Pro Ser His Pro Pro Gln

			340					345				350			
Thr	Val	Pro	Gly	Ser	Asn	Ser	Trp	Ala	Pro	Pro	Met	Gly	Ala	Gly	Ser
		355					360					365			
His	Arg	Val	Glu	Gly	Trp	Thr	Val	Tyr	Gly	Leu	Ala	Thr	Leu	Leu	Ile
		370					375					380			
Leu	Thr	Val	Thr	Ala	Ile	Val	Ala	Lys	Ile	Leu	Leu	His	Val	Thr	Phe
385					390					395					400
Lys	Ser	His	Arg	Val	Pro	Ala	Ser	Gly	Asp	Leu	Arg	Asp	Cys	His	Gln
				405					410					415	
Pro	Gly	Thr	Ser	Gly	Glu	Ile	Trp	Ser	Ile	Phe	Tyr	Lys	Pro	Ser	Thr
			420					425					430		
Ser	Ile	Ser	Ile	Phe	Lys	Lys	Lys	Leu	Lys	Gly	Gln	Ser	Gln	Gln	Asp
		435					440					445			
Asp	Arg	Asn	Pro	Leu	Val	Ser	Asp								
	450					455									

<210> 376
 <211> 373
 <212> PRT
 <213> Homo sapiens

<400> 376

Ala	Arg	Pro	Ala	Pro	Ser	Pro	Gly	Leu	Gly	Pro	Gly	Pro	Glu	Cys	Phe
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Thr	Ala	Asn	Gly	Ala	Asp	Tyr	Arg	Gly	Thr	Gln	Asn	Trp	Thr	Ala	Leu
			20					25					30		
Gln	Gly	Gly	Lys	Pro	Cys	Leu	Phe	Trp	Asn	Glu	Thr	Phe	Gln	His	Pro
		35					40					45			
Tyr	Asn	Thr	Leu	Lys	Tyr	Pro	Asn	Gly	Glu	Gly	Gly	Leu	Gly	Glu	His
	50					55					60				
Asn	Tyr	Cys	Arg	Asn	Pro	Asp	Gly	Asp	Val	Ser	Pro	Trp	Cys	Tyr	Val
65					70					75					80
Ala	Glu	His	Glu	Asp	Gly	Val	Tyr	Trp	Lys	Tyr	Cys	Glu	Ile	Pro	Ala
				85					90					95	
Cys	Gln	Met	Pro	Gly	Asn	Leu	Gly	Cys	Tyr	Lys	Asp	His	Gly	Asn	Pro
			100					105					110		
Pro	Pro	Leu	Thr	Gly	Thr	Ser	Lys	Thr	Ser	Asn	Lys	Leu	Thr	Ile	Gln
		115					120					125			
Thr	Cys	Ile	Ser	Phe	Cys	Arg	Ser	Gln	Arg	Phe	Lys	Phe	Ala	Gly	Met
	130					135					140				
Glu	Ser	Gly	Tyr	Ala	Cys	Phe	Cys	Gly	Asn	Asn	Pro	Asp	Tyr	Trp	Lys
145					150					155					160
Tyr	Gly	Glu	Ala	Ala	Ser	Thr	Glu	Cys	Asn	Ser	Val	Cys	Phe	Gly	Asp
				165					170					175	
His	Thr	Gln	Pro	Cys	Gly	Gly	Asp	Gly	Arg	Ile	Ile	Leu	Phe	Asp	Thr
		180						185					190		
Leu	Val	Gly	Ala	Cys	Gly	Gly	Asn	Tyr	Ser	Ala	Met	Ser	Ser	Val	Val
		195					200					205			
Tyr	Ser	Pro	Asp	Phe	Pro	Asp	Thr	Tyr	Ala	Thr	Gly	Arg	Val	Cys	Tyr
	210					215					220				
Trp	Thr	Ile	Arg	Val	Pro	Gly	Ala	Ser	His	Ile	His	Phe	Ser	Phe	Pro
225					230					235					240
Leu	Phe	Asp	Ile	Arg	Asp	Ser	Ala	Asp	Met	Val	Glu	Leu	Leu	Asp	Gly
				245					250					255	
Tyr	Thr	His	Arg	Val	Leu	Ala	Arg	Phe	His	Gly	Arg	Ser	Arg	Pro	Pro
			260					265					270		

Leu Ser Phe Asn Val Ser Leu Asp Phe Val Ile Leu Tyr Phe Phe Ser
 275 280 285
 Asp Arg Ile Asn Gln Ala Gln Gly Phe Ala Val Leu Tyr Gln Ala Val
 290 295 300
 Lys Glu Glu Leu Pro Gln Glu Arg Pro Ala Val Asn Gln Thr Val Ala
 305 310 315 320
 Glu Val Ile Thr Glu Gln Ala Asn Leu Ser Val Ser Ala Ala Arg Ser
 325 330 335
 Ser Lys Val Leu Tyr Val Ile Thr Thr Ser Pro Ser His Pro Pro Gln
 340 345 350
 Thr Val Pro Gly Ser Asn Ser Trp Ala Pro Pro Met Gly Ala Gly Ser
 355 360 365
 His Arg Val Glu Gly
 370

<210> 377
 <211> 23
 <212> PRT
 <213> Homo sapiens

<400> 377
 Trp Thr Val Tyr Gly Leu Ala Thr Leu Leu Ile Leu Thr Val Thr Ala
 1 5 10 15
 Ile Val Ala Lys Ile Leu Leu
 20

<210> 378
 <211> 60
 <212> PRT
 <213> Homo sapiens

<400> 378
 His Val Thr Phe Lys Ser His Arg Val Pro Ala Ser Gly Asp Leu Arg
 1 5 10 15
 Asp Cys His Gln Pro Gly Thr Ser Gly Glu Ile Trp Ser Ile Phe Tyr
 20 25 30
 Lys Pro Ser Thr Ser Ile Ser Ile Phe Lys Lys Lys Leu Lys Gly Gln
 35 40 45
 Ser Gln Gln Asp Asp Arg Asn Pro Leu Val Ser Asp
 50 55 60

<210> 379
 <211> 4628
 <212> DNA
 <213> Homo sapiens

<400> 379
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 ctgaattcct gctttctcat cagcagtttt aatggaacag atttggagtt gaggctgggc 180
 aatggagacg gtccctgctc tgggacagtg gaggtgaaat tccagggaca gtgggggact 240
 gtgtgtgatg atgggtggaa cactactgcc tcaactgtcg tgtgcaaaca gcttggatgt 300
 ccattttctt tcgccatgtt tcgttttggg caagccgtga ctagacatgg aaaaatttgg 360
 cttgatgatg tttcctgtta tggaaatgag tcagctctct gggaatgtca acaccgggaa 420

tggggaagcc	ataactgtta	tcatggagaa	gatgttggtg	tgaactgtta	tggggaagcc	480
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tggaattgca	gacatcgtag	atggggaaat	catgactgca	gtcacaatga	ggatgtcaca	780
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aacaatgctg	cagctgatgt	cgtatgcaag	cagttgggat	gtggaaccgc	acttcacttc	960
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gagacctgcc	tcaagagaga	ggaccacat	gggacaagaa	cctcagatga	cacccccaac	4320
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acaacaactt	ttaaatgaat	aaagaggaag	tcaagttgcc	ctatggaâaa	cttgtccaaa	4500
taacattttct	tgaacaatag	gagaacagct	aaattgataa	agactggtga	taataaaaaat	4560
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gggtcgac						4628

<210> 380

<211> 4359

<212> DNA

<213> Homo sapiens

<400> 380

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tttaattggaa	cagattttgga	gttgaggctg	gtcaatggag	acggtccttg	ctctgggaca	180
gtggaggtga	aattccaggg	acagtggggg	actgtgtgtg	atgatgggtg	gaacactact	240
gcctcaactg	tcgtgtgcaa	acagcttgga	tgtccatttt	ctttcgccat	gtttcgtttt	300
ggacaagccg	tgactagaca	tggaaaaatt	tggcttgatg	atgtttcctg	ttatggaaat	360
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gaagatgttg	gtgtgaaactg	ttatggtgaa	gccaatctgg	gtttgaggct	agtggatgga	480
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gatgatgggt	ggaacttgaa	tactgctgcc	gtggtgtgca	ggcaactagg	atgtccatct	600
tcttttattt	cttctggagt	tgttaatagc	cctgctgtat	tgcgccccat	ttggctggat	660
gacattttat	gccaggggaa	tgagttggca	ctctggaatt	gcagacatcg	tggatgggga	720
aatcatgact	gcagtcacaa	tgaggatgtc	acattaaactt	gttatgatag	tagtgatctt	780
gaactaaggc	ttgtaggttg	aactaaccgc	tgtatgggga	gagtagagct	gaaaatccaa	840
ggaagggtgg	ggaccgtatg	ccaccataag	tggacaatat	ctgcagctga	tgtcgtatgc	900
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tctgatgttg	tatggcttga	tgggtgtctc	tgtctccggt	atgaatcttt	tctttgggac	1020
tgcagacatt	ccggaaccgt	caattttgac	tgtcttcata	aaaacgatgt	gtctgtgatc	1080
tgtcagatg	gagcagattt	ggaactgcga	ctagcagatg	gaagtaacaa	ttgttcaggg	1140
agagttagag	tgagaattca	tgaacagtgg	tggacaatat	gtgaccagaa	ctggaagaat	1200
gaacaagccc	ttgtggtttg	taagcagcta	ggatgtccgt	tcagcgtctt	tggcagtcgt	1260
cgtgctaaac	ctagtaatga	agctagagac	atltggataa	acagcatatc	ttgactggg	1320
aatgagtcag	ctctctggga	ctgcacatat	gatggaaaag	caaagcgaac	atgcttccga	1380
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caaggacggt	ggggcacagt	gtgtgatgac	ggctggaaca	gtaaagctgc	agctgtggtg	1860
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<210> 381
 <211> 1453
 <212> PRT
 <213> Homo sapiens

<400> 381

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			20					25					30		
Asn	Ser	Cys	Phe	Leu	Ile	Ser	Ser	Phe	Asn	Gly	Thr	Asp	Leu	Glu	Leu
			35				40					45			
Arg	Leu	Val	Asn	Gly	Asp	Gly	Pro	Cys	Ser	Gly	Thr	Val	Glu	Val	Lys
			50			55					60				
Phe	Gln	Gly	Gln	Trp	Gly	Thr	Val	Cys	Asp	Asp	Gly	Trp	Asn	Thr	Thr
65					70				75					80	
Ala	Ser	Thr	Val	Val	Cys	Lys	Gln	Leu	Gly	Cys	Pro	Phe	Ser	Phe	Ala
				85				90						95	
Met	Phe	Arg	Phe	Gly	Gln	Ala	Val	Thr	Arg	His	Gly	Lys	Ile	Trp	Leu

			100					105					110					
Asp	Asp	Val	Ser	Cys	Tyr	Gly	Asn	Glu	Ser	Ala	Leu	Trp	Glu	Cys	Gln			
			115					120					125					
His	Arg	Glu	Trp	Gly	Ser	His	Asn	Cys	Tyr	His	Gly	Glu	Asp	Val	Gly			
			130					135					140					
Val	Asn	Cys	Tyr	Gly	Glu	Ala	Asn	Leu	Gly	Leu	Arg	Leu	Val	Asp	Gly			
145				150					155					160				
Asn	Asn	Ser	Cys	Ser	Gly	Arg	Val	Glu	Val	Lys	Phe	Gln	Glu	Arg	Trp			
			165					170					175					
Gly	Thr	Ile	Cys	Asp	Asp	Gly	Trp	Asn	Leu	Asn	Thr	Ala	Ala	Val	Val			
			180					185					190					
Cys	Arg	Gln	Leu	Gly	Cys	Pro	Ser	Ser	Phe	Ile	Ser	Ser	Gly	Val	Val			
			195					200					205					
Asn	Ser	Pro	Ala	Val	Leu	Arg	Pro	Ile	Trp	Leu	Asp	Asp	Ile	Leu	Cys			
			210					215					220					
Gln	Gly	Asn	Glu	Leu	Ala	Leu	Trp	Asn	Cys	Arg	His	Arg	Gly	Trp	Gly			
225				230					235					240				
Asn	His	Asp	Cys	Ser	His	Asn	Glu	Asp	Val	Thr	Leu	Thr	Cys	Tyr	Asp			
			245					250					255					
Ser	Ser	Asp	Leu	Glu	Leu	Arg	Leu	Val	Gly	Gly	Thr	Asn	Arg	Cys	Met			
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Gly	Arg	Val	Glu	Leu	Lys	Ile	Gln	Gly	Arg	Trp	Gly	Thr	Val	Cys	His			
			275					280					285					
His	Lys	Trp	Asn	Asn	Ala	Ala	Ala	Asp	Val	Val	Cys	Lys	Gln	Leu	Gly			
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Cys	Gly	Thr	Ala	Leu	His	Phe	Ala	Gly	Leu	Pro	His	Leu	Gln	Ser	Gly			
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Ser	Asp	Val	Val	Trp	Leu	Asp	Gly	Val	Ser	Cys	Ser	Gly	Asn	Glu	Ser			
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Phe	Leu	Trp	Asp	Cys	Arg	His	Ser	Gly	Thr	Val	Asn	Phe	Asp	Cys	Leu			
			340					345					350					
His	Gln	Asn	Asp	Val	Ser	Val	Ile	Cys	Ser	Asp	Gly	Ala	Asp	Leu	Glu			
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Leu	Arg	Leu	Ala	Asp	Gly	Ser	Asn	Asn	Cys	Ser	Gly	Arg	Val	Glu	Val			
			370					375					380					
Arg	Ile	His	Glu	Gln	Trp	Trp	Thr	Ile	Cys	Asp	Gln	Asn	Trp	Lys	Asn			
385				390					395					400				
Glu	Gln	Ala	Leu	Val	Val	Cys	Lys	Gln	Leu	Gly	Cys	Pro	Phe	Ser	Val			
			405					410					415					
Phe	Gly	Ser	Arg	Arg	Ala	Lys	Pro	Ser	Asn	Glu	Ala	Arg	Asp	Ile	Trp			
			420					425					430					
Ile	Asn	Ser	Ile	Ser	Cys	Thr	Gly	Asn	Glu	Ser	Ala	Leu	Trp	Asp	Cys			
			435					440					445					
Thr	Tyr	Asp	Gly	Lys	Ala	Lys	Arg	Thr	Cys	Phe	Arg	Arg	Ser	Asp	Ala			
			450					455					460					
Gly	Val	Ile	Cys	Ser	Asp	Lys	Ala	Asp	Leu	Asp	Leu	Arg	Leu	Val	Gly			
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Ala	His	Ser	Pro	Cys	Tyr	Gly	Arg	Leu	Glu	Val	Lys	Tyr	Gln	Gly	Glu			
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Trp	Gly	Thr	Val	Cys	His	Asp	Arg	Trp	Ser	Thr	Arg	Asn	Ala	Ala	Val			
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Val	Cys	Lys	Gln	Leu	Gly	Cys	Gly	Lys	Pro	Met	His	Val	Phe	Gly	Met			
			515					520					525					
Thr	Tyr	Phe	Lys	Glu	Ala	Ser	Gly	Pro	Ile	Trp	Leu	Asp	Asp	Val	Ser			
			530					535</										

Gly	Lys	His	Asn	Cys	Val	His	Arg	Glu	Asp	Val	Ile	Val	Thr	Cys	Ser		
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Gly	Asp	Ala	Thr	Trp	Gly	Leu	Arg	Leu	Val	Gly	Gly	Ser	Asn	Arg	Cys		
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Ser	Gly	Arg	Leu	Glu	Val	Tyr	Phe	Gln	Gly	Arg	Trp	Gly	Thr	Val	Cys		
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Asp	Asp	Gly	Trp	Asn	Ser	Lys	Ala	Ala	Ala	Val	Val	Cys	Ser	Gln	Leu		
	610					615					620						
Asp	Cys	Pro	Ser	Ser	Ile	Ile	Gly	Met	Gly	Leu	Gly	Asn	Ala	Ser	Thr		
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Ser	His	Ser	Glu	Asp	Val	Gly	Val	Ile	Cys	Ser	Asp	Ala	Ser	Asp	Met		
		675					680					685					
Glu	Leu	Arg	Leu	Val	Gly	Gly	Ser	Ser	Arg	Cys	Ala	Gly	Lys	Val	Glu		
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Val	Asn	Val	Gln	Gly	Ala	Val	Gly	Ile	Leu	Cys	Ala	Asn	Gly	Trp	Gly		
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Met	Asn	Ile	Ala	Glu	Val	Val	Cys	Arg	Gln	Leu	Glu	Cys	Gly	Ser	Ala		
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Ile	Arg	Val	Ser	Arg	Glu	Pro	His	Phe	Thr	Glu	Arg	Thr	Leu	His	Ile		
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Leu	Met	Ser	Asn	Ser	Gly	Cys	Thr	Gly	Gly	Glu	Ala	Ser	Leu	Trp	Asp		
		755					760					765					
Cys	Ile	Arg	Trp	Glu	Trp	Lys	Gln	Thr	Ala	Cys	His	Leu	Asn	Met	Glu		
	770					775					780						
Ala	Ser	Leu	Ile	Cys	Ser	Ala	His	Arg	Gln	Pro	Arg	Leu	Val	Gly	Ala		
	785				790					795					800		
Asp	Met	Pro	Cys	Ser	Gly	Arg	Val	Glu	Val	Lys	His	Ala	Asp	Thr	Trp		
			805					810						815			
Arg	Ser	Val	Cys	Asp	Ser	Asp	Phe	Ser	Leu	His	Ala	Ala	Asn	Val	Leu		
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Cys	Arg	Glu	Leu	Asn	Cys	Gly	Asp	Ala	Ile	Ser	Leu	Ser	Val	Gly	Asp		
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His	Phe	Gly	Lys	Gly	Asn	Gly	Leu	Thr	Trp	Ala	Glu	Lys	Phe	Gln	Cys		
	850				855						860						
Glu	Gly	Ser	Glu	Thr	His	Leu	Ala	Leu	Cys	Pro	Ile	Val	Gln	His	Pro		
	865				870					875					880		
Glu	Asp	Thr	Cys	Ile	His	Ser	Arg	Glu	Val	Gly	Val	Val	Cys	Ser	Arg		
			885						890					895			
Tyr	Thr	Asp	Val	Arg	Leu	Val	Asn	Gly	Lys	Ser	Gln	Cys	Asp	Gly	Gln		
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Val	Glu	Ile	Asn	Val	Leu	Gly	His	Trp	Gly	Ser	Leu	Cys	Asp	Thr	His		
		915					920					925					
Trp	Asp	Pro	Glu	Asp	Ala	Arg	Val	Leu	Cys	Arg	Gln	Leu	Ser	Cys	Gly		
	930					935					940						
Thr	Ala	Leu	Ser	Thr	Thr	Gly	Gly	Lys	Tyr	Ile	Gly	Glu	Arg	Ser	Val		
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Arg	Val	Trp	Gly	His	Arg	Phe	His	Cys	Leu	Gly	Asn	Glu	Ser	Leu	Leu		
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Asp	Asn	Cys	Gln	Met	Thr	Val	Leu	Gly	Ala	Pro	Pro	Cys	Ile	His	Gly		
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Asn	Thr	Val	Ser	Val	Ile	Cys	Thr	Gly	Ser	Leu	Thr	Gln	Pro	Leu	Phe		
		995					1000					1005					
Pro	Cys	Leu	Ala	Asn	Val	Ser	Asp	Pro	Tyr	Leu	Ser	Ala	Val	Pro	Glu		

1010	1015	1020
Gly Ser Ala Leu Ile Cys Leu Glu Asp Lys Arg Leu Arg Leu Val Asp		
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Gly Asp Ser Arg Cys Ala Gly Arg Val Glu Ile Tyr His Asp Gly Phe		1040
	1045	1050
Trp Gly Thr Ile Cys Asp Asp Gly Trp Asp Leu Ser Asp Ala His Val		1055
	1060	1065
Val Cys Gln Lys Leu Gly Cys Gly Val Ala Phe Asn Ala Thr Val Ser		1070
	1075	1080
Ala His Phe Gly Glu Gly Ser Gly Pro Ile Trp Leu Asp Asp Leu Asn		1085
	1090	1095
Cys Thr Gly Thr Glu Ser His Leu Trp Gln Cys Pro Ser Arg Gly Trp		1100
1105	1110	1115
Gly Gln His Asp Cys Arg His Lys Glu Asp Ala Gly Val Ile Cys Ser		1120
	1125	1130
Glu Phe Thr Ala Leu Arg Leu Tyr Ser Glu Thr Glu Thr Glu Ser Cys		1135
	1140	1145
Ala Gly Arg Leu Glu Val Phe Tyr Asn Gly Thr Trp Gly Ser Val Gly		1150
	1155	1160
Arg Arg Asn Ile Thr Thr Ala Ile Ala Gly Ile Val Cys Arg Gln Leu		1165
1170	1175	1180
Gly Cys Gly Glu Asn Gly Val Val Ser Leu Ala Pro Leu Ser Lys Thr		1185
1185	1190	1195
Gly Ser Gly Phe Met Trp Val Asp Asp Ile Gln Cys Pro Lys Thr His		1200
	1205	1210
Ile Ser Ile Trp Gln Cys Leu Ser Ala Pro Trp Glu Arg Arg Ile Ser		1215
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Ser Pro Ala Glu Glu Thr Trp Ile Thr Cys Glu Asp Arg Ile Arg Val		1230
	1235	1240
Arg Gly Gly Asp Thr Glu Cys Ser Gly Arg Val Glu Ile Trp His Ala		1245
1250	1255	1260
Gly Ser Trp Gly Thr Val Cys Asp Asp Ser Trp Asp Leu Ala Glu Ala		1265
1265	1270	1275
Glu Val Val Cys Gln Gln Leu Gly Cys Gly Ser Ala Leu Ala Ala Leu		1280
	1285	1290
Arg Asp Ala Ser Phe Gly Gln Gly Thr Gly Thr Ile Trp Leu Asp Asp		1295
	1300	1305
Met Arg Cys Lys Gly Asn Glu Ser Phe Leu Trp Asp Cys His Ala Lys		1310
	1315	1320
Pro Trp Gly Gln Ser Asp Cys Gly His Lys Glu Asp Ala Gly Val Arg		1325
1330	1335	1340
Cys Ser Gly Gln Ser Leu Lys Ser Leu Asn Ala Ser Ser Gly His Leu		1345
1345	1350	1355
Ala Leu Ile Leu Ser Ser Ile Phe Gly Leu Leu Leu Leu Val Leu Phe		1360
	1365	1370
Ile Leu Phe Leu Thr Trp Cys Arg Val Gln Lys Gln Lys His Leu Pro		1375
	1380	1385
Leu Arg Val Ser Thr Arg Arg Arg Gly Ser Leu Glu Glu Asn Leu Phe		1390
	1395	1400
His Glu Met Glu Thr Cys Leu Lys Arg Glu Asp Pro His Gly Thr Arg		1405
1410	1415	1420
Thr Ser Asp Asp Thr Pro Asn His Gly Cys Glu Asp Ala Ser Asp Thr		1425
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Ser Leu Leu Gly Val Leu Pro Ala Ser Glu Ala Thr Lys		1440
	1445	1450

<210> 382
 <211> 40
 <212> PRT
 <213> Homo sapiens

<400> 382
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 Asn Ser Cys Phe Leu Ile Ser Ser
 35 40

<210> 383
 <211> 1413
 <212> PRT
 <213> Homo sapiens

<400> 383
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 20 25 30
 Cys Asp Asp Gly Trp Asn Thr Thr Ala Ser Thr Val Val Cys Lys Gln
 35 40 45
 Leu Gly Cys Pro Phe Ser Phe Ala Met Phe Arg Phe Gly Gln Ala Val
 50 55 60
 Thr Arg His Gly Lys Ile Trp Leu Asp Asp Val Ser Cys Tyr Gly Asn
 65 70 75 80
 Glu Ser Ala Leu Trp Glu Cys Gln His Arg Glu Trp Gly Ser His Asn
 85 90 95
 Cys Tyr His Gly Glu Asp Val Gly Val Asn Cys Tyr Gly Glu Ala Asn
 100 105 110
 Leu Gly Leu Arg Leu Val Asp Gly Asn Asn Ser Cys Ser Gly Arg Val
 115 120 125
 Glu Val Lys Phe Gln Glu Arg Trp Gly Thr Ile Cys Asp Asp Gly Trp
 130 135 140
 Asn Leu Asn Thr Ala Ala Val Val Cys Arg Gln Leu Gly Cys Pro Ser
 145 150 155 160
 Ser Phe Ile Ser Ser Gly Val Val Asn Ser Pro Ala Val Leu Arg Pro
 165 170 175
 Ile Trp Leu Asp Asp Ile Leu Cys Gln Gly Asn Glu Leu Ala Leu Trp
 180 185 190
 Asn Cys Arg His Arg Gly Trp Gly Asn His Asp Cys Ser His Asn Glu
 195 200 205
 Asp Val Thr Leu Thr Cys Tyr Asp Ser Ser Asp Leu Glu Leu Arg Leu
 210 215 220
 Val Gly Gly Thr Asn Arg Cys Met Gly Arg Val Glu Leu Lys Ile Gln
 225 230 235 240
 Gly Arg Trp Gly Thr Val Cys His His Lys Trp Asn Asn Ala Ala Ala
 245 250 255
 Asp Val Val Cys Lys Gln Leu Gly Cys Gly Thr Ala Leu His Phe Ala
 260 265 270
 Gly Leu Pro His Leu Gln Ser Gly Ser Asp Val Val Trp Leu Asp Gly
 275 280 285
 Val Ser Cys Ser Gly Asn Glu Ser Phe Leu Trp Asp Cys Arg His Ser

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Gly Thr Val Asn Phe Asp Cys Leu His Gln Asn Asp Val Ser Val Ile				
305		310		315
Cys Ser Asp Gly Ala Asp Leu Glu Leu Arg Leu Ala Asp Gly Ser Asn				
	325		330	335
Asn Cys Ser Gly Arg Val Glu Val Arg Ile His Glu Gln Trp Trp Thr				
	340		345	350
Ile Cys Asp Gln Asn Trp Lys Asn Glu Gln Ala Leu Val Val Cys Lys				
	355		360	365
Gln Leu Gly Cys Pro Phe Ser Val Phe Gly Ser Arg Arg Ala Lys Pro				
	370		375	380
Ser Asn Glu Ala Arg Asp Ile Trp Ile Asn Ser Ile Ser Cys Thr Gly				
385		390		395
Asn Glu Ser Ala Leu Trp Asp Cys Thr Tyr Asp Gly Lys Ala Lys Arg				
	405		410	415
Thr Cys Phe Arg Arg Ser Asp Ala Gly Val Ile Cys Ser Asp Lys Ala				
	420		425	430
Asp Leu Asp Leu Arg Leu Val Gly Ala His Ser Pro Cys Tyr Gly Arg				
	435		440	445
Leu Glu Val Lys Tyr Gln Gly Glu Trp Gly Thr Val Cys His Asp Arg				
	450		455	460
Trp Ser Thr Arg Asn Ala Ala Val Val Cys Lys Gln Leu Gly Cys Gly				
465		470		475
Lys Pro Met His Val Phe Gly Met Thr Tyr Phe Lys Glu Ala Ser Gly				
	485		490	495
Pro Ile Trp Leu Asp Asp Val Ser Cys Ile Gly Asn Glu Ser Asn Ile				
	500		505	510
Trp Asp Cys Glu His Ser Gly Trp Gly Lys His Asn Cys Val His Arg				
	515		520	525
Glu Asp Val Ile Val Thr Cys Ser Gly Asp Ala Thr Trp Gly Leu Arg				
	530		535	540
Leu Val Gly Gly Ser Asn Arg Cys Ser Gly Arg Leu Glu Val Tyr Phe				
545		550		555
Gln Gly Arg Trp Gly Thr Val Cys Asp Asp Gly Trp Asn Ser Lys Ala				
	565		570	575
Ala Ala Val Val Cys Ser Gln Leu Asp Cys Pro Ser Ser Ile Ile Gly				
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Met Gly Leu Gly Asn Ala Ser Thr Gly Tyr Gly Lys Ile Trp Leu Asp				
	595		600	605
Asp Val Ser Cys Asp Gly Asp Glu Ser Asp Leu Trp Ser Cys Arg Asn				
	610		615	620
Ser Gly Trp Gly Asn Asn Asp Cys Ser His Ser Glu Asp Val Gly Val				
625		630		635
Ile Cys Ser Asp Ala Ser Asp Met Glu Leu Arg Leu Val Gly Gly Ser				
	645		650	655
Ser Arg Cys Ala Gly Lys Val Glu Val Asn Val Gln Gly Ala Val Gly				
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Ile Leu Cys Ala Asn Gly Trp Gly Met Asn Ile Ala Glu Val Val Cys				
	675		680	685
Arg Gln Leu Glu Cys Gly Ser Ala Ile Arg Val Ser Arg Glu Pro His				
	690		695	700
Phe Thr Glu Arg Thr Leu His Ile Leu Met Ser Asn Ser Gly Cys Thr				
705		710		715
Gly Gly Glu Ala Ser Leu Trp Asp Cys Ile Arg Trp Glu Trp Lys Gln				
	725		730	735
Thr Ala Cys His Leu Asn Met Glu Ala Ser Leu Ile Cys Ser Ala His				
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Arg	Gln	Pro	Arg	Leu	Val	Gly	Ala	Asp	Met	Pro	Cys	Ser	Gly	Arg	Val
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Glu	Val	Lys	His	Ala	Asp	Thr	Trp	Arg	Ser	Val	Cys	Asp	Ser	Asp	Phe
	770					775					780				
Ser	Leu	His	Ala	Ala	Asn	Val	Leu	Cys	Arg	Glu	Leu	Asn	Cys	Gly	Asp
785					790					795					800
Ala	Ile	Ser	Leu	Ser	Val	Gly	Asp	His	Phe	Gly	Lys	Gly	Asn	Gly	Leu
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Thr	Trp	Ala	Glu	Lys	Phe	Gln	Cys	Glu	Gly	Ser	Glu	Thr	His	Leu	Ala
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Leu	Cys	Pro	Ile	Val	Gln	His	Pro	Glu	Asp	Thr	Cys	Ile	His	Ser	Arg
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Gly	Lys	Ser	Gln	Cys	Asp	Gly	Gln	Val	Glu	Ile	Asn	Val	Leu	Gly	His
865					870					875					880
Trp	Gly	Ser	Leu	Cys	Asp	Thr	His	Trp	Asp	Pro	Glu	Asp	Ala	Arg	Val
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 <211> 761
 <212> PRT
 <213> Homo sapiens

<400> 389

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Gly	Gly	Gly	Gln	Gly	Pro	Met	Pro	Arg	Val	Arg	Tyr	Tyr	Ala	Gly	Asp
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Arg	Glu	Ala	Ile	Leu	Ala	Leu	Asp	Ile	Gln	Asp	Pro	Gly	Val	Pro	Arg
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Leu	Lys	Asn	Met	Ile	Pro	Trp	Pro	Ala	Ser	Asp	Arg	Lys	Lys	Ser	Glu
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Cys	Ala	Phe	Lys	Lys	Lys	Ser	Asn	Glu	Thr	Gln	Cys	Phe	Asn	Phe	Ile
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Pro	Phe	Asp	Pro	Ala	His	Lys	His	Thr	Ala	Val	Leu	Val	Asp	Gly	Met
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Phe	Glu	Arg	Leu	His	Thr	Ser	Arg	Val	Ala	Arg	Val	Cys	Lys	Asn	Asp
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Val	Gly	Gly	Glu	Lys	Leu	Leu	Gln	Lys	Lys	Trp	Thr	Thr	Phe	Leu	Lys
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			325					330						335	
Ala	Val	Cys	Ala	Phe	Ser	Leu	Leu	Asp	Ile	Glu	Arg	Val	Phe	Lys	Gly
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Lys	Tyr	Lys	Glu	Leu	Asn	Lys	Glu	Thr	Ser	Arg	Trp	Thr	Thr	Tyr	Arg
	355					360						365			
Gly	Pro	Glu	Thr	Asn	Pro	Arg	Pro	Gly	Ser	Cys	Ser	Val	Gly	Pro	Ser
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Ser	Asp	Lys	Ala	Leu	Thr	Phe	Met	Lys	Asp	His	Phe	Leu	Met	Asp	Glu
385					390					395					400
Gln	Val	Val	Gly	Thr	Pro	Leu	Leu	Val	Lys	Ser	Gly	Val	Glu	Tyr	Thr
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Arg	Leu	Ala	Val	Glu	Thr	Ala	Gln	Gly	Leu	Asp	Gly	His	Ser	His	Leu
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<212> PRT

<213> Homo sapiens

<400> 391

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Phe	Asp	Thr	Leu	Leu	Leu	Ser	Gly	Asp	Gly	Asn	Thr	Leu	Tyr	Val	Gly
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Ala	Arg	Glu	Ala	Ile	Leu	Ala	Leu	Asp	Ile	Gln	Asp	Pro	Gly	Val	Pro
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Arg	Leu	Lys	Asn	Met	Ile	Pro	Trp	Pro	Ala	Ser	Asp	Arg	Lys	Lys	Ser
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Glu	Cys	Ala	Phe	Lys	Lys	Lys	Ser	Asn	Glu	Thr	Gln	Cys	Phe	Asn	Phe
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Ile	Arg	Val	Leu	Val	Ser	Tyr	Asn	Val	Thr	His	Leu	Tyr	Thr	Cys	Gly
			100					105						110	
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Tyr	Leu	Leu	Pro	Ile	Ser	Glu	Asp	Lys	Val	Met	Glu	Gly	Lys	Gly	Gln
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Ser	Pro	Phe	Asp	Pro	Ala	His	Lys	His	Thr	Ala	Val	Leu	Val	Asp	Gly
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			180					185					190		
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Thr	Gln	Val	Val	Tyr	Phe	Phe	Phe	Glu	Glu	Thr	Ala	Ser	Glu	Phe	Asp
		210					215					220			
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Gly	Lys	Tyr	Lys	Glu	Leu	Asn	Lys	Glu	Thr	Ser	Arg	Trp	Thr	Thr	Tyr
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Thr	Arg	Leu	Ala	Val	Glu	Thr	Ala	Gln	Gly	Leu	Asp	Gly	His	Ser	His
385					390					395					400
Leu	Val	Met	Tyr	Leu	Gly	Thr	Thr	Thr	Gly	Ser	Leu	His	Lys	Ala	Val
				405					410					415	
Val	Ser	Gly	Asp	Ser	Ser	Ala	His	Leu	Val	Glu	Glu	Ile	Gln	Leu	Phe

Glu	Cys	Ala	Phe	Lys	Lys	Lys	Ser	Asn	Glu	Thr	Gln	Cys	Phe	Asn	Phe
			85						90					95	
Ile	Arg	Val	Leu	Val	Ser	Tyr	Asn	Val	Thr	His	Leu	Tyr	Thr	Cys	Gly
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Thr	Phe	Ala	Phe	Ser	Pro	Ala	Cys	Thr	Phe	Ile	Glu	Leu	Gln	Asp	Ser
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Met	Leu	Tyr	Ser	Gly	Thr	Met	Asn	Asn	Phe	Leu	Gly	Ser	Glu	Pro	Ile
				165					170					175	
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			180					185					190		
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			195				200					205			
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			210			215					220				
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225					230					235					240
Asp	Val	Gly	Gly	Glu	Lys	Leu	Leu	Gln	Lys	Lys	Trp	Thr	Thr	Phe	Leu
				245					250					255	
Lys	Ala	Gln	Leu	Leu	Cys	Thr	Gln	Pro	Gly	Gln	Leu	Pro	Phe	Asn	Val
			260					265					270		
Ile	Arg	His	Ala	Val	Leu	Leu	Pro	Ala	Asp	Ser	Pro	Thr	Ala	Pro	His
			275				280					285			
Ile	Tyr	Ala	Val	Phe	Thr	Ser	Gln	Trp	Gln	Val	Gly	Gly	Thr	Arg	Ser
			290			295					300				
Ser	Ala	Val	Cys	Ala	Phe	Ser	Leu	Leu	Asp	Ile	Glu	Arg	Val	Phe	Lys
305					310					315					320
Gly	Lys	Tyr	Lys	Glu	Leu	Asn	Lys	Glu	Thr	Ser	Arg	Trp	Thr	Thr	Tyr
				325					330					335	
Arg	Gly	Pro	Glu	Thr	Asn	Pro	Arg	Pro	Gly	Ser	Cys	Ser	Val	Gly	Pro
			340					345					350		
Ser	Ser	Asp	Lys	Ala	Leu	Thr	Phe	Met	Lys	Asp	His	Phe	Leu	Met	Asp
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						375					380				
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				405					410					415	
Val	Ser	Gly	Asp	Ser	Ser	Ala	His	Leu	Val	Glu	Glu	Ile	Gln	Leu	Phe
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Pro	Asp	Pro	Glu	Pro	Val	Arg	Asn	Leu	Gln	Leu	Ala	Pro	Thr	Gln	Gly
			435				440					445			
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Glu	Trp	Ala	Cys	Ala	Ser	Gly	Pro	Met	Ser	Arg	Ser	Leu	Arg	Pro	Gln
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Ser His Gly Pro Ala	Ala Val Pro Glu Ala	Ser Ser Thr Val Tyr Asn		
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Gly Ser Leu Leu Ile	Val Gln Asp Gly Val	Gly Gly Leu Tyr Gln		
	580	585		590
Cys Trp Ala Thr Glu	Asn Gly Phe Ser Tyr	Pro Val Ile Ser Tyr Trp		
	595	600		605
Val Asp Ser Gln Asp	Gln Thr Leu Ala Leu	Asp Pro Glu Leu Ala Gly		
	610	615		620
Ile Pro Arg Glu His	Val Lys Val Pro Leu	Thr Arg Val Ser Gly Gly		
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 <212> PRT
 <213> Homo sapiens

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<210> 394
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<212> DNA
<213> Homo sapiens

<400> 403

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<210> 404

<211> 1365

<212> DNA

<213> Homo sapiens

<400> 404

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aagaacttaa	atgaaatgct	ctgtcccat	attgcaagt	aagtcaaagc	gctaaatgcc	480
aacctcagca	cactggaggt	tttaaccaag	attgacaact	acactctgct	ggattactcc	540
ctaatacagt	ctccagaaat	tactgagaac	taccttgacc	tgaacttgaa	gggtgtattc	600
tacccactgg	aaaacctcac	cgaccccccc	ttctcaccag	ttccttttgt	gctcccagaa	660
cgcagcaact	ccatgctcta	cattggaatc	gccgagtatt	tctttaaatc	tgcgctcctt	720
gctcatttca	cagctgggggt	tttcaatctc	actctctcca	ccgaagagat	ttccaacat	780
tttgttcaaa	actctcaagg	ccttggcaac	gtgctctccc	ggattgcaga	gatctacatc	840
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ccaggcaatt tcaccctgga catccctgcc tccatcatga tgctcaccca acccaagaac 960
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<210> 405
 <211> 455
 <212> PRT
 <213> Homo sapiens

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<400> 405
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Asn Leu Tyr Val Ser Ser Ser Gln Thr Ile Tyr Pro Gly Ile Lys Ala
  20          25          30
Arg Ile Thr Gln Arg Ala Leu Asp Tyr Gly Val Gln Ala Gly Met Lys
  35          40          45
Met Ile Glu Gln Met Leu Lys Glu Lys Lys Leu Pro Asp Leu Ser Gly
  50          55          60
Ser Glu Ser Leu Glu Phe Leu Lys Val Asp Tyr Val Asn Tyr Asn Phe
  65          70          75          80
Ser Asn Ile Lys Ile Ser Ala Phe Ser Phe Pro Asn Thr Ser Leu Ala
  85          90          95
Phe Val Pro Gly Val Gly Ile Lys Ala Leu Thr Asn His Gly Thr Ala
 100          105          110
Asn Ile Ser Thr Asp Trp Gly Phe Glu Ser Pro Leu Phe Val Leu Tyr
 115          120          125
Asn Ser Phe Ala Glu Pro Met Glu Lys Pro Ile Leu Lys Asn Leu Asn
 130          135          140
Glu Met Leu Cys Pro Ile Ile Ala Ser Glu Val Lys Ala Leu Asn Ala
 145          150          155          160
Asn Leu Ser Thr Leu Glu Val Leu Thr Lys Ile Asp Asn Tyr Thr Leu
 165          170          175
Leu Asp Tyr Ser Leu Ile Ser Ser Pro Glu Ile Thr Glu Asn Tyr Leu
 180          185          190
Asp Leu Asn Leu Lys Gly Val Phe Tyr Pro Leu Glu Asn Leu Thr Asp
 195          200          205
Pro Pro Phe Ser Pro Val Pro Phe Val Leu Pro Glu Arg Ser Asn Ser
 210          215          220
Met Leu Tyr Ile Gly Ile Ala Glu Tyr Phe Phe Lys Ser Ala Ser Phe
 225          230          235          240
Ala His Phe Thr Ala Gly Val Phe Asn Leu Thr Leu Ser Thr Glu Glu
 245          250          255
Ile Ser Asn His Phe Val Gln Asn Ser Gln Gly Leu Gly Asn Val Leu
 260          265          270
Ser Arg Ile Ala Glu Ile Tyr Ile Leu Ser Gln Pro Phe Met Val Arg
 275          280          285
Ile Met Ala Thr Glu Pro Pro Ile Ile Asn Leu Gln Pro Gly Asn Phe
 290          295          300
Thr Leu Asp Ile Pro Ala Ser Ile Met Met Leu Thr Gln Pro Lys Asn
 305          310          315          320
Ser Thr Val Glu Thr Ile Val Ser Met Asp Phe Val Ala Ser Thr Ser
 325          330          335

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Val	Gly	Leu	Val	Ile	Leu	Gly	Gln	Arg	Leu	Val	Cys	Ser	Leu	Ser	Leu
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Asn	Arg	Phe	Arg	Leu	Ala	Leu	Pro	Glu	Ser	Asn	Arg	Ser	Asn	Ile	Glu
		355					360					365			
Val	Leu	Arg	Phe	Glu	Asn	Ile	Leu	Ser	Ser	Ile	Leu	His	Phe	Gly	Val
	370					375					380				
Leu	Pro	Leu	Ala	Asn	Ala	Lys	Leu	Gln	Gln	Gly	Phe	Pro	Leu	Pro	Asn
385					390					395					400
Pro	His	Lys	Phe	Leu	Phe	Val	Asn	Ser	Asp	Ile	Glu	Val	Leu	Glu	Gly
			405						410					415	
Phe	Leu	Leu	Ile	Ser	Thr	Asp	Leu	Lys	Tyr	Glu	Thr	Ser	Ser	Lys	Gln
			420					425					430		
Gln	Pro	Ser	Phe	His	Val	Trp	Glu	Gly	Leu	Asn	Leu	Ile	Ser	Arg	Gln
		435					440					445			
Trp	Arg	Gly	Lys	Ser	Ala	Pro									
	450					455									

<210> 406
 <211> 23
 <212> PRT
 <213> Homo sapiens

<400> 406															
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			20												

<210> 407
 <211> 432
 <212> PRT
 <213> Homo sapiens

<400> 407															
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Asp	Tyr	Gly	Val	Gln	Ala	Gly	Met	Lys	Met	Ile	Glu	Gln	Met	Leu	Lys
		20					25					30			
Glu	Lys	Lys	Leu	Pro	Asp	Leu	Ser	Gly	Ser	Glu	Ser	Leu	Glu	Phe	Leu
	35					40					45				
Lys	Val	Asp	Tyr	Val	Asn	Tyr	Asn	Phe	Ser	Asn	Ile	Lys	Ile	Ser	Ala
	50				55					60					
Phe	Ser	Phe	Pro	Asn	Thr	Ser	Leu	Ala	Phe	Val	Pro	Gly	Val	Gly	Ile
65					70				75					80	
Lys	Ala	Leu	Thr	Asn	His	Gly	Thr	Ala	Asn	Ile	Ser	Thr	Asp	Trp	Gly
			85				90						95		
Phe	Glu	Ser	Pro	Leu	Phe	Val	Leu	Tyr	Asn	Ser	Phe	Ala	Glu	Pro	Met
			100				105						110		
Glu	Lys	Pro	Ile	Leu	Lys	Asn	Leu	Asn	Glu	Met	Leu	Cys	Pro	Ile	Ile
	115					120					125				
Ala	Ser	Glu	Val	Lys	Ala	Leu	Asn	Ala	Asn	Leu	Ser	Thr	Leu	Glu	Val
	130					135					140				
Leu	Thr	Lys	Ile	Asp	Asn	Tyr	Thr	Leu	Leu	Asp	Tyr	Ser	Leu	Ile	Ser
145					150				155					160	
Ser	Pro	Glu	Ile	Thr	Glu	Asn	Tyr	Leu	Asp	Leu	Asn	Leu	Lys	Gly	Val

Gly	Asn	Phe	Asp	Leu	Ser	Ile	Glu	Gly	Met	Ser	Ile	Ser	Ala	Asp	Leu
130						135					140				
Lys	Leu	Gly	Ser	Asn	Pro	Thr	Ser	Gly	Lys	Pro	Thr	Ile	Thr	Cys	Ser
145					150					155					160
Ser	Cys	Ser	Ser	His	Ile	Asn	Ser	Val	His	Val	His	Ile	Ser	Lys	Ser
				165					170					175	
Lys	Val	Gly	Trp	Leu	Ile	Gln	Leu	Phe	His	Lys	Lys	Ile	Glu	Ser	Ala
			180					185					190		
Leu	Arg	Asn	Lys	Met	Asn	Ser	Gln	Val	Cys	Glu	Lys	Val	Thr	Asn	Ser
		195					200					205			
Val	Ser	Ser	Lys	Leu	Gln	Pro	Tyr	Phe	Gln	Thr	Leu	Pro	Val	Met	Thr
	210				215						220				
Lys	Ile	Asp	Ser	Val	Ala	Gly	Ile	Asn	Tyr	Gly	Leu	Val	Ala	Pro	Pro
225					230					235					240
Ala	Thr	Thr	Ala	Glu	Thr	Leu	Asp	Val	Gln	Met	Lys	Gly	Glu	Phe	Tyr
				245					250					255	
Ser	Glu	Asn	His	His	Asn	Pro	Pro	Pro	Phe	Ala	Pro	Pro	Val	Met	Glu
			260					265					270		
Phe	Pro	Ala	Ala	His	Asp	Arg	Met	Val	Tyr	Leu	Gly	Leu	Ser	Asp	Tyr
	275						280					285			
Phe	Phe	Asn	Thr	Ala	Gly	Leu	Val	Tyr	Gln	Glu	Ala	Gly	Val	Leu	Lys
	290					295					300				
Met	Thr	Leu	Arg	Asp	Asp	Met	Ile	Pro	Lys	Glu	Ser	Lys	Phe	Arg	Leu
305					310					315					320
Thr	Thr	Lys	Phe	Phe	Gly	Thr	Phe	Leu	Pro	Glu	Val	Ala	Lys	Lys	Phe
				325					330					335	
Pro	Asn	Met	Lys	Ile	Gln	Ile	His	Val	Ser	Ala	Ser	Thr	Pro	Pro	His
			340					345					350		
Leu	Ser	Val	Gln	Pro	Thr	Gly	Leu	Thr	Phe	Tyr	Pro	Ala	Val	Asp	Val
		355					360					365			
Gln	Ala	Phe	Ala	Val	Leu	Pro	Asn	Ser	Ser	Leu	Ala	Ser	Leu	Phe	Leu
	370					375					380				
Ile	Gly	Met	His	Thr	Thr	Gly	Ser	Met	Glu	Val	Ser	Ala	Glu	Ser	Asn
385					390					395					400
Arg	Leu	Val	Gly	Glu	Leu	Lys	Leu	Asp	Arg	Leu	Leu	Leu	Glu	Leu	Lys
				405					410					415	
His	Ser	Asn	Ile	Gly	Pro	Phe	Pro	Val	Glu	Leu	Leu	Gln	Asp	Ile	Met
			420					425					430		
Asn	Tyr	Ile	Val	Pro	Ile	Leu	Val	Leu	Pro	Arg	Val	Asn	Glu	Lys	Leu
		435					440					445			
Gln	Lys	Gly	Phe	Pro	Leu	Pro	Thr	Pro	Ala	Arg	Val	Gln	Leu	Tyr	Asn
	450					455					460				
Val	Val	Leu	Gln	Pro	His	Gln	Asn	Phe	Leu	Leu	Phe	Gly	Ala	Asp	Val
465					470					475					480
Val	Tyr	Lys													

<210> 409
 <211> 481
 <212> PRT
 <213> Homo sapiens

<400> 409
 Met Gly Ala Leu Ala Arg Ala Leu Pro Ser Ile Leu Leu Ala Leu Leu
 1 5 10 15
 Leu Thr Ser Thr Pro Glu Ala Leu Gly Ala Asn Pro Gly Leu Val Ala

Lys

<210> 410
 <211> 383
 <212> PRT
 <213> Homo sapiens

<400> 410
 Met Arg Ile Ala His Ala Ser Ser Arg Gly Asn Ile Ser Ile Phe Ser
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 Val Phe Leu Ile Pro Leu Ile Ala Tyr Ile Leu Ile Leu Pro Gly Val
 20 25 30
 Arg Arg Lys Arg Val Val Thr Thr Val Thr Tyr Val Leu Met Leu Ala
 35 40 45
 Val Gly Gly Ala Leu Ile Ala Ser Leu Ile Tyr Pro Cys Trp Ala Ser
 50 55 60
 Gly Ser Gln Met Ile Tyr Thr Gln Phe Arg Gly His Ser Asn Glu Arg
 65 70 75 80
 Ile Leu Ala Lys Ile Gly Val Glu Ile Gly Leu Gln Lys Val Asn Val
 85 90 95
 Thr Leu Lys Phe Glu Arg Leu Leu Ser Ser Asn Asp Val Leu Pro Gly
 100 105 110
 Ser Asp Met Thr Glu Leu Tyr Tyr Asn Glu Gly Phe Asp Ile Ser Gly
 115 120 125
 Ile Ser Ser Met Ala Glu Ala Leu His His Gly Leu Glu Asn Gly Leu
 130 135 140
 Pro Tyr Pro Met Leu Ser Val Leu Glu Tyr Phe Ser Leu Asn Gln Asp
 145 150 155 160
 Ser Phe Asp Trp Gly Arg His Tyr Arg Val Ala Gly His Tyr Thr His
 165 170 175
 Ala Ala Ile Trp Phe Ala Phe Ala Cys Trp Cys Leu Ser Val Val Leu
 180 185 190
 Met Leu Phe Leu Pro His Asn Ala Tyr Lys Ser Ile Leu Ala Thr Gly
 195 200 205
 Ile Ser Cys Leu Ile Ala Cys Leu Val Tyr Leu Leu Leu Ser Pro Cys
 210 215 220
 Glu Leu Arg Ile Ala Phe Thr Gly Glu Asn Phe Glu Arg Val Asp Leu
 225 230 235 240
 Thr Ala Thr Phe Ser Phe Cys Phe Tyr Leu Ile Phe Ala Ile Gly Ile
 245 250 255
 Leu Cys Val Leu Cys Gly Leu Gly Leu Gly Ile Cys Glu His Trp Arg
 260 265 270
 Ile Tyr Thr Leu Ser Thr Phe Leu Asp Ala Ser Leu Asp Glu His Val
 275 280 285
 Gly Pro Lys Trp Lys Lys Leu Pro Thr Gly Gly Pro Ala Leu Gln Gly
 290 295 300
 Val Gln Ile Gly Ala Tyr Gly Thr Asn Thr Thr Asn Ser Ser Arg Asp
 305 310 315 320
 Lys Asn Asp Ile Ser Ser Asp Lys Thr Ala Gly Ser Ser Gly Phe Gln
 325 330 335
 Ser Arg Thr Ser Thr Cys Gln Ser Ser Ala Ser Ser Ala Ser Leu Arg
 340 345 350
 Ser Gln Ser Ser Ile Glu Thr Val His Asp Glu Ala Glu Leu Glu Arg
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 Thr His Val His Phe Leu Gln Glu Pro Cys Ser Ser Ser Ser Thr

370

375

380

<210> 411
 <211> 399
 <212> PRT
 <213> Homo sapiens

<400> 411

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			20					25					30		
Thr	Asn	Met	Asn	Val	Ser	Glu	Ile	Ser	Tyr	Trp	Gly	Phe	Pro	Ser	
		35					40				45				
Glu	Glu	Tyr	Leu	Val	Glu	Thr	Glu	Asp	Gly	Tyr	Ile	Leu	Cys	Leu	Asn
	50					55					60				
Arg	Ile	Pro	His	Gly	Arg	Lys	Asn	His	Ser	Asp	Lys	Gly	Pro	Lys	Pro
65					70					75					80
Val	Val	Phe	Leu	Gln	His	Gly	Leu	Leu	Ala	Asp	Ser	Ser	Asn	Trp	Val
				85					90					95	
Thr	Asn	Leu	Ala	Asn	Ser	Ser	Leu	Gly	Phe	Ile	Leu	Ala	Asp	Ala	Gly
			100					105					110		
Phe	Asp	Val	Trp	Met	Gly	Asn	Ser	Arg	Gly	Asn	Thr	Trp	Ser	Arg	Lys
	115						120					125			
His	Lys	Thr	Leu	Ser	Val	Ser	Gln	Asp	Glu	Phe	Trp	Ala	Phe	Ser	Tyr
	130					135					140				
Asp	Glu	Met	Ala	Lys	Tyr	Asp	Leu	Pro	Ala	Ser	Ile	Asn	Phe	Ile	Leu
145					150					155					160
Asn	Lys	Thr	Gly	Gln	Glu	Gln	Val	Tyr	Tyr	Val	Gly	His	Ser	Gln	Gly
				165					170					175	
Thr	Thr	Ile	Gly	Phe	Ile	Ala	Phe	Ser	Gln	Ile	Pro	Glu	Leu	Ala	Lys
		180						185					190		
Arg	Ile	Lys	Met	Phe	Phe	Ala	Leu	Gly	Pro	Val	Ala	Ser	Val	Ala	Phe
	195						200					205			
Cys	Thr	Ser	Pro	Met	Ala	Lys	Leu	Gly	Arg	Leu	Pro	Asp	His	Leu	Ile
210						215					220				
Lys	Asp	Leu	Phe	Gly	Asp	Lys	Glu	Phe	Leu	Pro	Gln	Ser	Ala	Phe	Leu
225					230					235					240
Lys	Trp	Leu	Gly	Thr	His	Val	Cys	Thr	His	Val	Ile	Leu	Lys	Glu	Leu
				245					250					255	
Cys	Gly	Asn	Leu	Cys	Phe	Leu	Leu	Cys	Gly	Phe	Asn	Glu	Arg	Asn	Leu
			260					265					270		
Asn	Met	Ser	Arg	Val	Asp	Val	Tyr	Thr	Thr	His	Ser	Pro	Ala	Gly	Thr
	275						280					285			
Ser	Val	Gln	Asn	Met	Leu	His	Trp	Ser	Gln	Ala	Val	Lys	Phe	Gln	Lys
	290					295					300				
Phe	Gln	Ala	Phe	Asp	Trp	Gly	Ser	Ser	Ala	Lys	Asn	Tyr	Phe	His	Tyr
305					310					315					320
Asn	Gln	Ser	Tyr	Pro	Pro	Thr	Tyr	Asn	Val	Lys	Asp	Met	Leu	Val	Pro
				325					330					335	
Thr	Ala	Val	Trp	Ser	Gly	Gly	His	Asp	Trp	Leu	Ala	Asp	Val	Tyr	Asp
			340					345					350		
Val	Asn	Ile	Leu	Leu	Thr	Gln	Ile	Thr	Asn	Leu	Val	Phe	His	Glu	Ser
	355					360						365			
Ile	Pro	Glu	Trp	Glu	His	Leu	Asp	Phe	Ile	Trp	Gly	Leu	Asp	Ala	Pro
	370					375					380				

Trp Arg Leu Tyr Asn Lys Ile Ile Asn Leu Met Arg Lys Tyr Gln
 385 390 395

<210> 412
 <211> 19
 <212> PRT
 <213> Homo sapiens

<400> 412
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 Thr Leu Ala

<210> 413
 <211> 451
 <212> PRT
 <213> Homo sapiens

<400> 413
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 Asn Gly Ala Asp Tyr Arg Gly Thr Gln Ser Trp Thr Ala Leu Gln Gly
 20 25 30
 Gly Lys Pro Cys Leu Phe Trp Asn Glu Thr Phe Gln His Pro Tyr Asn
 35 40 45
 Thr Leu Lys Tyr Pro Asn Gly Glu Gly Gly Leu Gly Glu His Asn Tyr
 50 55 60
 Cys Arg Asn Pro Asp Gly Asp Val Ser Pro Trp Cys Tyr Val Ala Glu
 65 70 75 80
 His Glu Asp Gly Val Tyr Trp Lys Tyr Cys Glu Ile Pro Ala Cys Gln
 85 90 95
 Met Pro Gly Asn Leu Gly Cys Tyr Lys Asp His Gly Asn Pro Pro Pro
 100 105 110
 Leu Thr Gly Thr Ser Lys Thr Ser Asn Lys Leu Thr Ile Gln Thr Cys
 115 120 125
 Ile Ser Phe Cys Arg Ser Gln Arg Phe Lys Phe Ala Gly Met Glu Ser
 130 135 140
 Gly Tyr Ala Cys Phe Cys Gly Asn Asn Pro Asp Tyr Trp Lys His Gly
 145 150 155 160
 Glu Ala Ala Ser Thr Glu Cys Asn Ser Val Cys Phe Gly Asp His Thr
 165 170 175
 Gln Pro Cys Gly Gly Asp Gly Arg Ile Ile Leu Phe Asp Thr Leu Val
 180 185 190
 Gly Ala Cys Gly Gly Asn Tyr Ser Ala Met Ala Ala Val Val Tyr Ser
 195 200 205
 Pro Asp Phe Pro Asp Thr Tyr Ala Thr Gly Arg Val Cys Tyr Trp Thr
 210 215 220
 Ile Arg Val Pro Gly Ala Ser Arg Ile His Phe Asn Phe Thr Leu Phe
 225 230 235 240
 Asp Ile Arg Asp Ser Ala Asp Met Val Glu Leu Leu Asp Gly Tyr Thr
 245 250 255
 His Arg Val Leu Val Arg Leu Ser Gly Arg Ser Arg Pro Pro Leu Ser
 260 265 270
 Phe Asn Val Ser Leu Asp Phe Val Ile Leu Tyr Phe Phe Ser Asp Arg

<400> 415

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<210> 416

<211> 1269

<212> DNA

<213> Homo sapiens

<400> 416

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gtggacccag aagcattcat gaatattagt gaaatcatcc aacatcaagg ctatccctgt 180
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gttgagggtg cttagcaactg gatttccaac ctgccaaca atagcctggg cttcattctg 360
gcagatgctg gttttgacgt gtggatgggg aacagcaggg gaaacgcctg gtctcgaaaa 420
cacaagacac tctccataga ccaagatgag ttctgggctt tcagttatga tgagatggct 480
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gcaaaaagcc ccgggaccaa atttttgttg ctgccagata tgatgatcaa gggattgttt 720
ggcaaaaaag aatttctgta tcagaccaga tttctcagac aacttggtat ttacctttgt 780
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accaacaata tgaacatgag ccgagcaagt gtatatgctg cccacactct tgctggaaca 900
tctgtgcaaa atattctaca ctggagccag gcagtgaatt ctggtgaact ccgggcattt 960
gactggggga gtgagaccaa aaatctggaa aaatgcaatc agccaactcc tgtaaggtag 1020
agagtcagag atatgacggg ccctacagca atgtggacag gaggtcagga ctgggtttca 1080
aatccagaag acgtgaaaat gctgctctct gaggtgacca acctcatcta ccataagaat 1140
attcctgaat ggggtcacgt ggatttcacg tggggtttgg atgctcctca ccgtatgtac 1200
aatgaaatca tccatctgat gcagcaggag gagaccaacc tttcccaggg acggtgtgag 1260
gccgtattg                                     1269

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<210> 417
<211> 423
<212> PRT
<213> Homo sapiens

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<400> 417
Met Leu Glu Thr Leu Ser Arg Gln Trp Ile Val Ser His Arg Met Glu
 1          5          10          15
Met Trp Leu Leu Ile Leu Val Ala Tyr Met Phe Gln Arg Asn Val Asn
 20          25          30
Ser Val His Met Pro Thr Lys Ala Val Asp Pro Glu Ala Phe Met Asn
 35          40          45
Ile Ser Glu Ile Ile Gln His Gln Gly Tyr Pro Cys Glu Glu Tyr Glu
 50          55          60
Val Ala Thr Glu Asp Gly Tyr Ile Leu Ser Val Asn Arg Ile Pro Arg
 65          70          75          80
Gly Leu Val Gln Pro Lys Lys Thr Gly Ser Arg Pro Val Val Leu Leu
 85          90          95
Gln His Gly Leu Val Gly Gly Ala Ser Asn Trp Ile Ser Asn Leu Pro
100          105          110
Asn Asn Ser Leu Gly Phe Ile Leu Ala Asp Ala Gly Phe Asp Val Trp
115          120          125
Met Gly Asn Ser Arg Gly Asn Ala Trp Ser Arg Lys His Lys Thr Leu
130          135          140
Ser Ile Asp Gln Asp Glu Phe Trp Ala Phe Ser Tyr Asp Glu Met Ala
145          150          155          160
Arg Phe Asp Leu Pro Ala Val Ile Asn Phe Ile Leu Gln Lys Thr Gly
165          170          175
Gln Glu Lys Ile Tyr Tyr Val Gly Tyr Ser Gln Gly Thr Thr Met Gly
180          185          190
Phe Ile Ala Phe Ser Thr Met Pro Glu Leu Ala Gln Lys Ile Lys Met
195          200          205
Tyr Phe Ala Leu Ala Pro Ile Ala Thr Val Lys His Ala Lys Ser Pro
210          215          220
Gly Thr Lys Phe Leu Leu Leu Pro Asp Met Met Ile Lys Gly Leu Phe
225          230          235          240
Gly Lys Lys Glu Phe Leu Tyr Gln Thr Arg Phe Leu Arg Gln Leu Val
245          250          255
Ile Tyr Leu Cys Gly Gln Val Ile Leu Asp Gln Ile Cys Ser Asn Ile
260          265          270
Met Leu Leu Leu Gly Gly Phe Asn Thr Asn Asn Met Asn Met Ser Arg
275          280          285
Ala Ser Val Tyr Ala Ala His Thr Leu Ala Gly Thr Ser Val Gln Asn
290          295          300
Ile Leu His Trp Ser Gln Ala Val Asn Ser Gly Glu Leu Arg Ala Phe
305          310          315          320
Asp Trp Gly Ser Glu Thr Lys Asn Leu Glu Lys Cys Asn Gln Pro Thr

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				325					330					335			
Pro	Val	Arg	Tyr	Arg	Val	Arg	Asp	Met	Thr	Val	Pro	Thr	Ala	Met	Trp		
			340					345					350				
Thr	Gly	Gly	Gln	Asp	Trp	Leu	Ser	Asn	Pro	Glu	Asp	Val	Lys	Met	Leu		
		355					360					365					
Leu	Ser	Glu	Val	Thr	Asn	Leu	Ile	Tyr	His	Lys	Asn	Ile	Pro	Glu	Trp		
	370					375					380						
Ala	His	Val	Asp	Phe	Ile	Trp	Gly	Leu	Asp	Ala	Pro	His	Arg	Met	Tyr		
385					390					395					400		
Asn	Glu	Ile	Ile	His	Leu	Met	Gln	Gln	Glu	Glu	Thr	Asn	Leu	Ser	Gln		
				405					410					415			
Gly	Arg	Cys	Glu	Ala	Val	Leu											
			420														

<210> 418
 <211> 33
 <212> PRT
 <213> Homo sapiens

<400> 418
 Met Leu Glu Thr Leu Ser Arg Gln Trp Ile Val Ser His Arg Met Glu
 1 5 10 15
 Met Trp Leu Leu Ile Leu Val Ala Tyr Met Phe Gln Arg Asn Val Asn
 20 25 30
 Ser

<210> 419
 <211> 390
 <212> PRT
 <213> Homo sapiens

<400> 419
 Val His Met Pro Thr Lys Ala Val Asp Pro Glu Ala Phe Met Asn Ile
 1 5 10 15
 Ser Glu Ile Ile Gln His Gln Gly Tyr Pro Cys Glu Glu Tyr Glu Val
 20 25 30
 Ala Thr Glu Asp Gly Tyr Ile Leu Ser Val Asn Arg Ile Pro Arg Gly
 35 40 45
 Leu Val Gln Pro Lys Lys Thr Gly Ser Arg Pro Val Val Leu Leu Gln
 50 55 60
 His Gly Leu Val Gly Gly Ala Ser Asn Trp Ile Ser Asn Leu Pro Asn
 65 70 75 80
 Asn Ser Leu Gly Phe Ile Leu Ala Asp Ala Gly Phe Asp Val Trp Met
 85 90 95
 Gly Asn Ser Arg Gly Asn Ala Trp Ser Arg Lys His Lys Thr Leu Ser
 100 105 110
 Ile Asp Gln Asp Glu Phe Trp Ala Phe Ser Tyr Asp Glu Met Ala Arg
 115 120 125
 Phe Asp Leu Pro Ala Val Ile Asn Phe Ile Leu Gln Lys Thr Gly Gln
 130 135 140
 Glu Lys Ile Tyr Tyr Val Gly Tyr Ser Gln Gly Thr Thr Met Gly Phe
 145 150 155 160
 Ile Ala Phe Ser Thr Met Pro Glu Leu Ala Gln Lys Ile Lys Met Tyr
 165 170 175

Phe	Ala	Leu	Ala	Pro	Ile	Ala	Thr	Val	Lys	His	Ala	Lys	Ser	Pro	Gly
			180					185					190		
Thr	Lys	Phe	Leu	Leu	Leu	Pro	Asp	Met	Met	Ile	Lys	Gly	Leu	Phe	Gly
		195					200					205			
Lys	Lys	Glu	Phe	Leu	Tyr	Gln	Thr	Arg	Phe	Leu	Arg	Gln	Leu	Val	Ile
	210					215					220				
Tyr	Leu	Cys	Gly	Gln	Val	Ile	Leu	Asp	Gln	Ile	Cys	Ser	Asn	Ile	Met
225					230					235					240
Leu	Leu	Leu	Gly	Gly	Phe	Asn	Thr	Asn	Asn	Met	Asn	Met	Ser	Arg	Ala
			245						250					255	
Ser	Val	Tyr	Ala	Ala	His	Thr	Leu	Ala	Gly	Thr	Ser	Val	Gln	Asn	Ile
			260					265					270		
Leu	His	Trp	Ser	Gln	Ala	Val	Asn	Ser	Gly	Glu	Leu	Arg	Ala	Phe	Asp
		275					280					285			
Trp	Gly	Ser	Glu	Thr	Lys	Asn	Leu	Glu	Lys	Cys	Asn	Gln	Pro	Thr	Pro
	290					295					300				
Val	Arg	Tyr	Arg	Val	Arg	Asp	Met	Thr	Val	Pro	Thr	Ala	Met	Trp	Thr
305					310					315					320
Gly	Gly	Gln	Asp	Trp	Leu	Ser	Asn	Pro	Glu	Asp	Val	Lys	Met	Leu	Leu
			325						330					335	
Ser	Glu	Val	Thr	Asn	Leu	Ile	Tyr	His	Lys	Asn	Ile	Pro	Glu	Trp	Ala
			340					345					350		
His	Val	Asp	Phe	Ile	Trp	Gly	Leu	Asp	Ala	Pro	His	Arg	Met	Tyr	Asn
		355					360					365			
Glu	Ile	Ile	His	Leu	Met	Gln	Gln	Glu	Glu	Thr	Asn	Leu	Ser	Gln	Gly
	370					375					380				
Arg	Cys	Glu	Ala	Val	Leu										
385					390										

<210> 420
 <211> 221
 <212> PRT
 <213> Homo sapiens

<400> 420

Val	His	Met	Pro	Thr	Lys	Ala	Val	Asp	Pro	Glu	Ala	Phe	Met	Asn	Ile
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Ser	Glu	Ile	Ile	Gln	His	Gln	Gly	Tyr	Pro	Cys	Glu	Glu	Tyr	Glu	Val
		20					25						30		
Ala	Thr	Glu	Asp	Gly	Tyr	Ile	Leu	Ser	Val	Asn	Arg	Ile	Pro	Arg	Gly
		35				40						45			
Leu	Val	Gln	Pro	Lys	Lys	Thr	Gly	Ser	Arg	Pro	Val	Val	Leu	Leu	Gln
	50					55					60				
His	Gly	Leu	Val	Gly	Gly	Ala	Ser	Asn	Trp	Ile	Ser	Asn	Leu	Pro	Asn
65				70						75					80
Asn	Ser	Leu	Gly	Phe	Ile	Leu	Ala	Asp	Ala	Gly	Phe	Asp	Val	Trp	Met
			85					90						95	
Gly	Asn	Ser	Arg	Gly	Asn	Ala	Trp	Ser	Arg	Lys	His	Lys	Thr	Leu	Ser
			100				105						110		
Ile	Asp	Gln	Asp	Glu	Phe	Trp	Ala	Phe	Ser	Tyr	Asp	Glu	Met	Ala	Arg
	115					120						125			
Phe	Asp	Leu	Pro	Ala	Val	Ile	Asn	Phe	Ile	Leu	Gln	Lys	Thr	Gly	Gln
	130					135					140				
Glu	Lys	Ile	Tyr	Tyr	Val	Gly	Tyr	Ser	Gln	Gly	Thr	Thr	Met	Gly	Phe
145					150					155					160
Ile	Ala	Phe	Ser	Thr	Met	Pro	Glu	Leu	Ala	Gln	Lys	Ile	Lys	Met	Tyr

				165					170				175				
Phe	Ala	Leu	Ala	Pro	Ile	Ala	Thr	Val	Lys	His	Ala	Lys	Ser	Pro	Gly		
			180					185					190				
Thr	Lys	Phe	Leu	Leu	Leu	Pro	Asp	Met	Met	Ile	Lys	Gly	Leu	Phe	Gly		
		195					200					205					
Lys	Lys	Glu	Phe	Leu	Tyr	Gln	Thr	Arg	Phe	Leu	Arg	Gln					
	210					215					220						

<210> 421
 <211> 25
 <212> PRT
 <213> Homo sapiens

<400> 421																	
Leu	Val	Ile	Tyr	Leu	Cys	Gly	Gln	Val	Ile	Leu	Asp	Gln	Ile	Cys	Ser		
1				5				10						15			
Asn	Ile	Met	Leu	Leu	Leu	Gly	Gly	Phe									
			20				25										

<210> 422
 <211> 144
 <212> PRT
 <213> Homo sapiens

<400> 422																	
Asn	Thr	Asn	Asn	Met	Asn	Met	Ser	Arg	Ala	Ser	Val	Tyr	Ala	Ala	His		
1				5				10						15			
Thr	Leu	Ala	Gly	Thr	Ser	Val	Gln	Asn	Ile	Leu	His	Trp	Ser	Gln	Ala		
		20					25						30				
Val	Asn	Ser	Gly	Glu	Leu	Arg	Ala	Phe	Asp	Trp	Gly	Ser	Glu	Thr	Lys		
		35					40					45					
Asn	Leu	Glu	Lys	Cys	Asn	Gln	Pro	Thr	Pro	Val	Arg	Tyr	Arg	Val	Arg		
	50				55						60						
Asp	Met	Thr	Val	Pro	Thr	Ala	Met	Trp	Thr	Gly	Gly	Gln	Asp	Trp	Leu		
65				70				75						80			
Ser	Asn	Pro	Glu	Asp	Val	Lys	Met	Leu	Leu	Ser	Glu	Val	Thr	Asn	Leu		
			85					90						95			
Ile	Tyr	His	Lys	Asn	Ile	Pro	Glu	Trp	Ala	His	Val	Asp	Phe	Ile	Trp		
		100					105						110				
Gly	Leu	Asp	Ala	Pro	His	Arg	Met	Tyr	Asn	Glu	Ile	Ile	His	Leu	Met		
		115				120						125					
Gln	Gln	Glu	Glu	Thr	Asn	Leu	Ser	Gln	Gly	Arg	Cys	Glu	Ala	Val	Leu		
	130					135					140						

<210> 423
 <211> 2133
 <212> DNA
 <213> Homo sapiens

<400> 423																	
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ttcccgatgg	acaccacttt	ggccagcatc	atcatgatct	ttctgactgc	actggccacg	180											
ttcatcgtca	tcctgcctgg	cattcgggga	aagacgaggc	tgttctggct	gcttcgggtg	240											

gtgaccagct	tattcatcgg	ggctgcaatc	ctggctgtga	atttcagttc	tgagtgggtct	300
gtgggccagg	tcagcaccaa	cacatcatac	aaggccttca	gttctgagtg	gatcagcgct	360
gatattgggc	tgcaggtcgg	gctgggtgga	gtcaacatca	cactcacagg	gacccccgtg	420
cagcagctga	atgagaccat	caattacaac	gaggagtcca	cctggcgctc	gggtgagaac	480
tatgtctgagg	agtgtgcaaa	ggctctggag	aaggggctgc	cagaccctgt	gttgtagcta	540
gctgagaagt	tcactccaag	aagcccatgt	ggcctatacc	gccagtaccg	cctggcgagg	600
cactacacct	cagccatgct	atgggtggca	ttcctctgct	ggctgctggc	caatgtgatg	660
ctctccatgc	ctgtgctggt	atatggtggc	tacatgctat	tggccacggg	catcttccag	720
ctgttggtct	tgctcttctt	ctccatggcc	acatcactca	cctcaccctg	tcccctgcac	780
ctgggcgctt	ctgtgctgca	tactcaccat	gggcctgcct	tctggatcac	attgaccaca	840
ggactgctgt	gtgtgctgct	gggcctggct	atggcggtgg	cccacaggat	gcagcctcac	900
aggctgaagg	ctttcttcaa	ccagagtgtg	gatgaagacc	ccatgctgga	gtggagtcct	960
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gacattcccc	tgtcagaggc	ttcctccacc	aaggcatact	gtaaggaggc	acaccccaaa	1080
gaccttgatt	gtgctttata	acattcctcc	ccgtggaggc	cacctggact	tccagtctgg	1140
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agacacccag	caccaatcta	cagacggagt	agaaaaagga	ggctctatat	actgatgtta	1260
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gcctgttgcc	atgataaggc	caagcagggg	ctagcttatc	tgcacagcaa	cccagccttt	1380
ccgtgctgcc	ttgcctcttc	aagatgctat	tcactgaaac	ctaacttcac	cccataaca	1440
ccagcagggg	gggggttaca	tatgattctc	ctatggtttc	ctctcatccc	tcggcacctc	1500
ttgttttctt	tttctctggg	ttccttttgt	tttctcttta	cttctccagc	ttgtgtggcc	1560
tttttggtaca	atgaaagaca	gcactggaaa	ggaggggaaa	ccaaacttct	catcctaggt	1620
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aacgctattc	cttcccaccc	cactcagctg	ggctagctga	gtggcatcca	ggacggggga	1860
gtgggtgacc	tgcctcatca	ctgccaccta	acgtccccct	gggggtgggtc	agaaagatgc	1920
tagctctggt	agggtccctc	cggcctcact	agagggcgcc	cctattactc	tggagtcgac	1980
gcagagaatc	aggtttcaca	gcactgcgga	gagtgtacta	ggctgtctcc	agcccagcga	2040
agctcatgag	gacgtgcgac	cccggcgccg	agaagccatg	aaaattaatg	ggaaaaacag	2100
tttttaaaaa	aaaaaaaaaa	aaagggcgcc	cgc			2133

<210> 424
 <211> 1029
 <212> DNA
 <213> Homo sapiens

<400> 424						
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gacaccactt	tggccagcat	catcatgata	tttctgactg	cactggccac	gttcacgtc	120
atcctgcctg	gcattcgggg	aaagacgagg	ctgttctggc	tgcttcgggt	ggtgaccagc	180
ttattcatcg	gggctgcaat	cctggctgtg	aatttcagtt	ctgagtggtc	tgtgggccag	240
gtcagcacca	acacatcata	caaggccttc	agttctgagt	ggatcagcgc	tgatattggg	300
ctgcaggtcg	ggctgggtgg	agtcaacatc	acactcacag	ggacccccgt	gcagcagctg	360
aatgagacca	tcaattacaa	cgaggagttc	acctggcgcc	tgggtgagaa	ctatgctgag	420
gagtgtgcaa	aggctctgga	gaaggggctg	ccagaccctg	tggtgtacct	agctgagaag	480
ttcactccaa	gaagcccatg	tggcctatac	cgccagtacc	gcctggcggg	acactacacc	540
tcagccatgc	tatgggtggc	attcctctgc	tggtgctggt	ccaatgtgat	gctctccatg	600
cctgtgctgg	tatatgggtg	ctacatgcta	ttggccacgg	gcattctcca	gctgttggct	660
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tgtgtgctgc	tgggcctggc	tatggcggtg	gccacagga	tgcagcctca	caggctgaag	840
gctttcttca	accagagtgt	ggatgaagac	cccatgctgg	agtggagtcc	tgaggaagg	900
ggactcctga	gcccccgcta	ccggtccatg	gctgacagtc	ccaagtccca	ggacattccc	960
ctgtcagagg	cttctctccac	caaggcatac	tgtaaggagg	cacaccccaa	agatcctgat	1020
tgtgcttta						1029

<210> 425
 <211> 343
 <212> PRT
 <213> Homo sapiens

<400> 425

Met	Ala	Thr	Leu	Gly	His	Thr	Phe	Pro	Phe	Tyr	Ala	Gly	Pro	Lys	Pro
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Thr	Phe	Pro	Met	Asp	Thr	Thr	Leu	Ala	Ser	Ile	Ile	Met	Ile	Phe	Leu
			20					25					30		
Thr	Ala	Leu	Ala	Thr	Phe	Ile	Val	Ile	Leu	Pro	Gly	Ile	Arg	Gly	Lys
		35					40					45			
Thr	Arg	Leu	Phe	Trp	Leu	Leu	Arg	Val	Val	Thr	Ser	Leu	Phe	Ile	Gly
	50					55					60				
Ala	Ala	Ile	Leu	Ala	Val	Asn	Phe	Ser	Ser	Glu	Trp	Ser	Val	Gly	Gln
65					70					75					80
Val	Ser	Thr	Asn	Thr	Ser	Tyr	Lys	Ala	Phe	Ser	Ser	Glu	Trp	Ile	Ser
			85						90					95	
Ala	Asp	Ile	Gly	Leu	Gln	Val	Gly	Leu	Gly	Gly	Val	Asn	Ile	Thr	Leu
			100					105					110		
Thr	Gly	Thr	Pro	Val	Gln	Gln	Leu	Asn	Glu	Thr	Ile	Asn	Tyr	Asn	Glu
		115					120					125			
Glu	Phe	Thr	Trp	Arg	Leu	Gly	Glu	Asn	Tyr	Ala	Glu	Glu	Cys	Ala	Lys
	130					135					140				
Ala	Leu	Glu	Lys	Gly	Leu	Pro	Asp	Pro	Val	Leu	Tyr	Leu	Ala	Glu	Lys
145					150					155					160
Phe	Thr	Pro	Arg	Ser	Pro	Cys	Gly	Leu	Tyr	Arg	Gln	Tyr	Arg	Leu	Ala
			165						170					175	
Gly	His	Tyr	Thr	Ser	Ala	Met	Leu	Trp	Val	Ala	Phe	Leu	Cys	Trp	Leu
		180						185					190		
Leu	Ala	Asn	Val	Met	Leu	Ser	Met	Pro	Val	Leu	Val	Tyr	Gly	Gly	Tyr
		195					200					205			
Met	Leu	Leu	Ala	Thr	Gly	Ile	Phe	Gln	Leu	Leu	Ala	Leu	Leu	Phe	Phe
	210				215						220				
Ser	Met	Ala	Thr	Ser	Leu	Thr	Ser	Pro	Cys	Pro	Leu	His	Leu	Gly	Ala
225					230					235					240
Ser	Val	Leu	His	Thr	His	His	Gly	Pro	Ala	Phe	Trp	Ile	Thr	Leu	Thr
			245						250					255	
Thr	Gly	Leu	Leu	Cys	Val	Leu	Leu	Gly	Leu	Ala	Met	Ala	Val	Ala	His
		260						265					270		
Arg	Met	Gln	Pro	His	Arg	Leu	Lys	Ala	Phe	Phe	Asn	Gln	Ser	Val	Asp
		275					280					285			
Glu	Asp	Pro	Met	Leu	Glu	Trp	Ser	Pro	Glu	Glu	Gly	Gly	Leu	Leu	Ser
	290					295					300				
Pro	Arg	Tyr	Arg	Ser	Met	Ala	Asp	Ser	Pro	Lys	Ser	Gln	Asp	Ile	Pro
305					310					315					320
Leu	Ser	Glu	Ala	Ser	Ser	Thr	Lys	Ala	Tyr	Cys	Lys	Glu	Ala	His	Pro
			325						330					335	
Lys	Asp	Pro	Asp	Cys	Ala	Leu									
			340												

<210> 426
 <211> 23
 <212> PRT
 <213> Homo sapiens

<400> 426
 Met Ala Thr Leu Gly His Thr Phe Pro Phe Tyr Ala Gly Pro Lys Pro
 1 5 10 15
 Thr Phe Pro Met Asp Thr Thr
 20

<210> 427
 <211> 112
 <212> PRT
 <213> Homo sapiens

<400> 427
 Asn Phe Ser Ser Glu Trp Ser Val Gly Gln Val Ser Thr Asn Thr Ser
 1 5 10 15
 Tyr Lys Ala Phe Ser Ser Glu Trp Ile Ser Ala Asp Ile Gly Leu Gln
 20 25 30
 Val Gly Leu Gly Gly Val Asn Ile Thr Leu Thr Gly Thr Pro Val Gln
 35 40 45
 Gln Leu Asn Glu Thr Ile Asn Tyr Asn Glu Glu Phe Thr Trp Arg Leu
 50 55 60
 Gly Glu Asn Tyr Ala Glu Glu Cys Ala Lys Ala Leu Glu Lys Gly Leu
 65 70 75 80
 Pro Asp Pro Val Leu Tyr Leu Ala Glu Lys Phe Thr Pro Arg Ser Pro
 85 90 95
 Cys Gly Leu Tyr Arg Gln Tyr Arg Leu Ala Gly His Tyr Thr Ser Ala
 100 105 110

<210> 428
 <211> 22
 <212> PRT
 <213> Homo sapiens

<400> 428
 Thr Ser Leu Thr Ser Pro Cys Pro Leu His Leu Gly Ala Ser Val Leu
 1 5 10 15
 His Thr His His Gly Pro
 20

<210> 429
 <211> 19
 <212> PRT
 <213> Homo sapiens

<400> 429
 Leu Ala Ser Ile Ile Met Ile Phe Leu Thr Ala Leu Ala Thr Phe Ile
 1 5 10 15
 Val Ile Leu

<210> 430
 <211> 20
 <212> PRT

<213> Homo sapiens

<400> 430

Leu Phe Trp Leu Leu Arg Val Val Thr Ser Leu Phe Ile Gly Ala Ala
1 5 10 15
Ile Leu Ala Val
20

<210> 431

<211> 22

<212> PRT

<213> Homo sapiens

<400> 431

Met Leu Trp Val Ala Phe Leu Cys Trp Leu Leu Ala Asn Val Met Leu
1 5 10 15
Ser Met Pro Val Leu Val
20

<210> 432

<211> 17

<212> PRT

<213> Homo sapiens

<400> 432

Leu Ala Thr Gly Ile Phe Gln Leu Leu Ala Leu Leu Phe Phe Ser Met
1 5 10 15
Ala

<210> 433

<211> 22

<212> PRT

<213> Homo sapiens

<400> 433

Ala Phe Trp Ile Thr Leu Thr Thr Gly Leu Leu Cys Val Leu Leu Gly
1 5 10 15
Leu Ala Met Ala Val Ala
20

<210> 434

<211> 8

<212> PRT

<213> Homo sapiens

<400> 434

Pro Gly Ile Arg Gly Lys Thr Arg
1 5

<210> 435

<211> 6

<212> PRT
 <213> Homo sapiens

<400> 435
 Tyr Gly Gly Tyr Met Leu
 1 5

<210> 436
 <211> 72
 <212> PRT
 <213> Homo sapiens

<400> 436
 His Arg Met Gln Pro His Arg Leu Lys Ala Phe Phe Asn Gln Ser Val
 1 5 10 15
 Asp Glu Asp Pro Met Leu Glu Trp Ser Pro Glu Glu Gly Gly Leu Leu
 20 25 30
 Ser Pro Arg Tyr Arg Ser Met Ala Asp Ser Pro Lys Ser Gln Asp Ile
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 Pro Leu Ser Glu Ala Ser Ser Thr Lys Ala Tyr Cys Lys Glu Ala His
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 Pro Lys Asp Pro Asp Cys Ala Leu
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<210> 437
 <211> 4928
 <212> DNA
 <213> Mus sp.

<400> 437
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4928

<210> 438
<211> 1410
<212> DNA
<213> Mus sp.

<400> 438
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agagtcaaca agatgaccgc aatcccctcg 1410

<210> 439
<211> 470
<212> PRT
<213> Mus sp.

<400> 439
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Thr Leu Ala Ala Arg Pro Ala Pro Gly Pro Arg Ser Gly Pro Glu Cys
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Phe Thr Ala Asn Gly Ala Asp Tyr Arg Gly Thr Gln Ser Trp Thr Ala
35 40 45
Leu Gln Gly Gly Lys Pro Cys Leu Phe Trp Asn Glu Thr Phe Gln His
50 55 60
Pro Tyr Asn Thr Leu Lys Tyr Pro Asn Gly Glu Gly Leu Gly Glu
65 70 75 80
His Asn Tyr Cys Arg Asn Pro Asp Gly Asp Val Ser Pro Trp Cys Tyr
85 90 95
Val Ala Glu His Glu Asp Gly Val Tyr Trp Lys Tyr Cys Glu Ile Pro
100 105 110
Ala Cys Gln Met Pro Gly Asn Leu Gly Cys Tyr Lys Asp His Gly Asn
115 120 125
Pro Pro Pro Leu Thr Gly Thr Ser Lys Thr Ser Asn Lys Leu Thr Ile
130 135 140

Gln	Thr	Cys	Ile	Ser	Phe	Cys	Arg	Ser	Gln	Arg	Phe	Lys	Phe	Ala	Gly
145					150					155					160
Met	Glu	Ser	Gly	Tyr	Ala	Cys	Phe	Cys	Gly	Asn	Asn	Pro	Asp	Tyr	Trp
				165					170						175
Lys	His	Gly	Glu	Ala	Ala	Ser	Thr	Glu	Cys	Asn	Ser	Val	Cys	Phe	Gly
			180					185					190		
Asp	His	Thr	Gln	Pro	Cys	Gly	Gly	Asp	Gly	Arg	Ile	Ile	Leu	Phe	Asp
		195					200					205			
Thr	Leu	Val	Gly	Ala	Cys	Gly	Gly	Asn	Tyr	Ser	Ala	Met	Ala	Ala	Val
	210					215					220				
Val	Tyr	Ser	Pro	Asp	Phe	Pro	Asp	Thr	Tyr	Ala	Thr	Gly	Arg	Val	Cys
225					230					235					240
Tyr	Trp	Thr	Ile	Arg	Val	Pro	Gly	Ala	Ser	Arg	Ile	His	Phe	Asn	Phe
				245					250					255	
Thr	Leu	Phe	Asp	Ile	Arg	Asp	Ser	Ala	Asp	Met	Val	Glu	Leu	Leu	Asp
			260					265					270		
Gly	Tyr	Thr	His	Arg	Val	Leu	Val	Arg	Leu	Ser	Gly	Arg	Ser	Arg	Pro
		275					280					285			
Pro	Leu	Ser	Phe	Asn	Val	Ser	Leu	Asp	Phe	Val	Ile	Leu	Tyr	Phe	Phe
	290					295					300				
Ser	Asp	Arg	Ile	Asn	Gln	Ala	Gln	Gly	Phe	Ala	Val	Leu	Tyr	Gln	Ala
305					310					315					320
Thr	Lys	Glu	Glu	Pro	Pro	Gln	Glu	Arg	Pro	Ala	Val	Asn	Gln	Thr	Leu
				325					330					335	
Ala	Glu	Val	Ile	Thr	Glu	Gln	Ala	Asn	Leu	Ser	Val	Ser	Ala	Ala	His
			340					345					350		
Ser	Ser	Lys	Val	Leu	Tyr	Val	Ile	Thr	Pro	Ser	Pro	Ser	His	Pro	Pro
		355					360					365			
Gln	Thr	Ala	Gln	Val	Ala	Ile	Pro	Gly	His	Arg	Gln	Leu	Gly	Pro	Thr
	370					375					380				
Ala	Thr	Glu	Trp	Lys	Asp	Gly	Leu	Cys	Thr	Ala	Trp	Arg	Pro	Ser	Ser
385					390					395					400
Ser	Ser	Gln	Ser	Gln	Gln	Leu	Ser	Gln	Arg	Phe	Phe	Cys	Met	Ser	His
				405					410					415	
Leu	Asn	Leu	Ile	Glu	Ser	Leu	His	Gln	Glu	Thr	Leu	Gly	Thr	Val	Val
			420					425					430		
Ser	Leu	Gly	Leu	Leu	Glu	Ile	Ser	Gly	Pro	Phe	Ser	Met	Asn	Leu	Pro
		435					440					445			
Leu	Gln	Ser	Pro	Ser	Leu	Arg	Arg	Ser	Ser	Arg	Val	Arg	Val	Asn	Lys
	450					455					460				
Met	Thr	Ala	Ile	Pro	Ser										
465					470										

<210> 440
 <211> 760
 <212> PRT
 <213> Mus sp.

<400> 440
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 Phe Phe Phe Gln Leu Phe Leu Leu Pro Ser Leu Pro Pro Ala Ser Gly
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 Thr Gly Gly Gln Gly Pro Met Pro Arg Val Lys Tyr His Ala Gly Asp
 35 40 45
 Gly His Arg Ala Leu Ser Phe Phe Gln Gln Lys Gly Leu Arg Asp Phe

50		55		60	
Asp Thr Leu Leu Leu Ser Asp Asp Gly Asn Thr Leu Tyr Val Gly Ala					
65		70		75	80
Arg Glu Thr Val Leu Ala Leu Asn Ile Gln Asn Pro Gly Ile Pro Arg					
	85		90		95
Leu Lys Asn Met Ile Pro Trp Pro Ala Ser Glu Arg Lys Lys Thr Glu					
	100		105		110
Cys Ala Phe Lys Lys Lys Ser Asn Glu Thr Gln Cys Phe Asn Phe Ile					
	115		120		125
Arg Val Leu Val Ser Tyr Asn Ala Thr His Leu Tyr Ala Cys Gly Thr					
	130		135		140
Phe Ala Phe Ser Pro Ala Cys Thr Phe Ile Glu Leu Gln Asp Ser Leu					
	145		150		155
Leu Leu Pro Ile Leu Ile Asp Lys Val Met Asp Gly Lys Gly Gln Ser					
	165		170		175
Pro Leu Thr Leu Phe Thr Ser Thr Gln Ala Val Leu Val Asp Gly Met					
	180		185		190
Leu Tyr Ser Gly Thr Met Asn Asn Phe Leu Gly Ser Glu Pro Ile Leu					
	195		200		205
Met Arg Thr Leu Gly Ser His Pro Val Leu Lys Thr Asp Ile Phe Leu					
	210		215		220
Arg Trp Leu His Ala Asp Ala Ser Phe Val Ala Ile Pro Ser Thr					
	225		230		235
Gln Val Val Tyr Phe Phe Phe Glu Glu Thr Ala Ser Glu Phe Asp Phe					
	245		250		255
Phe Glu Glu Leu Tyr Ile Ser Arg Val Ala Gln Val Cys Lys Asn Asp					
	260		265		270
Val Gly Gly Glu Lys Leu Leu Gln Lys Lys Trp Thr Thr Phe Leu Lys					
	275		280		285
Ala Gln Leu Leu Cys Ala Gln Pro Gly Gln Leu Pro Phe Asn Ile Ile					
	290		295		300
Arg His Ala Val Leu Leu Pro Ala Asp Ser Pro Ser Val Ser Arg Ile					
	305		310		315
Tyr Ala Val Phe Thr Ser Gln Trp Gln Val Gly Gly Thr Arg Ser Ser					
	325		330		335
Ala Val Cys Ala Phe Ser Leu Thr Asp Ile Glu Arg Val Phe Lys Gly					
	340		345		350
Lys Tyr Lys Glu Leu Asn Lys Glu Thr Ser Arg Trp Thr Thr Tyr Arg					
	355		360		365
Gly Ser Glu Val Ser Pro Arg Pro Gly Ser Cys Ser Met Gly Pro Ser					
	370		375		380
Ser Asp Lys Ala Leu Thr Phe Met Lys Asp His Phe Leu Met Asp Glu					
	385		390		395
His Val Val Gly Thr Pro Leu Leu Val Lys Ser Gly Val Glu Tyr Thr					
	405		410		415
Arg Leu Ala Val Glu Ser Ala Arg Gly Leu Asp Gly Ser Ser His Val					
	420		425		430
Val Met Tyr Leu Gly Thr Ser Thr Gly Pro Leu His Lys Ala Val Val					
	435		440		445
Pro Gln Asp Ser Ser Ala Tyr Leu Val Glu Glu Ile Gln Leu Ser Pro					
	450		455		460
Asp Ser Glu Pro Val Arg Asn Leu Gln Leu Ala Pro Ala Gln Gly Ala					
	465		470		475
Val Phe Ala Gly Phe Ser Gly Gly Ile Trp Arg Val Pro Arg Ala Asn					
	485		490		495
Cys Ser Val Tyr Glu Ser Cys Val Asp Cys Val Leu Ala Arg Asp Pro					
	500		505		510

His	Cys	Ala	Trp	Asp	Pro	Glu	Ser	Arg	Leu	Cys	Ser	Leu	Leu	Ser	Gly
		515					520					525			
Ser	Thr	Lys	Pro	Trp	Lys	Gln	Asp	Met	Glu	Arg	Gly	Asn	Pro	Glu	Trp
		530				535					540				
Val	Cys	Thr	Arg	Gly	Pro	Met	Ala	Arg	Ser	Pro	Arg	Arg	Gln	Ser	Pro
545					550					555					560
Pro	Gln	Leu	Ile	Lys	Glu	Val	Leu	Thr	Val	Pro	Asn	Ser	Ile	Leu	Glu
				565					570						575
Leu	Arg	Cys	Pro	His	Leu	Ser	Ala	Leu	Ala	Ser	Tyr	His	Trp	Ser	His
			580					585					590		
Gly	Arg	Ala	Lys	Ile	Ser	Glu	Ala	Ser	Ala	Thr	Val	Tyr	Asn	Gly	Ser
		595					600					605			
Leu	Leu	Leu	Leu	Pro	Gln	Asp	Gly	Val	Gly	Gly	Leu	Tyr	Gln	Cys	Val
	610					615					620				
Ala	Thr	Glu	Asn	Gly	Tyr	Ser	Tyr	Pro	Val	Val	Ser	Tyr	Trp	Val	Asp
625					630					635					640
Ser	Gln	Asp	Gln	Pro	Leu	Ala	Leu	Asp	Pro	Glu	Leu	Ala	Gly	Val	Pro
				645					650					655	
Arg	Glu	Arg	Val	Gln	Val	Pro	Leu	Thr	Arg	Val	Gly	Gly	Gly	Ala	Ser
			660					665						670	
Met	Ala	Ala	Gln	Arg	Ser	Tyr	Trp	Pro	His	Phe	Leu	Ile	Val	Thr	Val
		675					680				685				
Leu	Leu	Ala	Ile	Val	Leu	Leu	Gly	Val	Leu	Thr	Leu	Leu	Leu	Ala	Ser
	690					695					700				
Pro	Leu	Gly	Ala	Leu	Arg	Ala	Arg	Gly	Lys	Val	Gln	Gly	Cys	Gly	Met
705					710					715					720
Leu	Pro	Pro	Arg	Glu	Lys	Ala	Pro	Leu	Ser	Arg	Asp	Gln	His	Leu	Gln
				725					730					735	
Pro	Ser	Lys	Asp	His	Arg	Thr	Ser	Ala	Ser	Asp	Val	Asp	Ala	Asp	Asn
			740					745					750		
Asn	His	Leu	Gly	Ala	Glu	Val	Ala								
		755					760								

<210> 441
 <211> 3046
 <212> PRT
 <213> Mus sp.

<400> 441															
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Ala	Gly	Gly	Gly	Gly	Thr	Cys	Thr	Gly	Thr	Ala	Cys	Thr	Gly	Cys	Thr
			20					25					30		
Gly	Gly	Gly	Gly	Ala	Ala	Cys	Cys	Ala	Thr	Cys	Thr	Gly	Gly	Thr	Gly
			35				40					45			
Ala	Cys	Cys	Ala	Thr	Cys	Thr	Cys	Ala	Gly	Gly	Cys	Thr	Gly	Ala	Cys
	50					55					60				
Cys	Ala	Thr	Gly	Gly	Cys	Cys	Cys	Thr	Ala	Cys	Cys	Ala	Thr	Cys	Cys
65					70					75					80
Cys	Thr	Gly	Gly	Gly	Cys	Cys	Ala	Gly	Gly	Ala	Cys	Thr	Cys	Ala	Thr
				85				90						95	
Gly	Gly	Ala	Gly	Thr	Cys	Thr	Cys	Cys	Thr	Gly	Cys	Gly	Thr	Gly	Thr
			100				105						110		
Thr	Thr	Thr	Thr	Thr	Thr	Cys	Thr	Thr	Cys	Cys	Ala	Ala	Cys	Thr	Cys
		115					120					125			
Thr	Thr	Cys	Cys	Thr	Gly	Cys	Thr	Gly	Cys	Cys	Ala	Thr	Cys	Ala	Cys

130		135		140
Thr Gly Cys Cys Ala Cys Cys Thr Gly Cys Thr Thr Cys Thr Gly Gly				
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Gly Ala Cys Thr Gly Gly Thr Gly Gly Thr Cys Ala Gly Gly Gly Gly				
	165		170	175
Cys Cys Cys Ala Thr Gly Cys Cys Cys Ala Gly Ala Gly Thr Cys Ala				
	180		185	190
Ala Ala Thr Ala Cys Cys Ala Thr Gly Cys Thr Gly Gly Ala Gly Ala				
	195		200	205
Cys Gly Gly Gly Cys Ala Cys Ala Gly Gly Gly Cys Cys Cys Thr Cys				
	210		215	220
Ala Gly Cys Thr Thr Cys Thr Thr Cys Cys Ala Ala Cys Ala Ala Ala				
225		230		235
Ala Ala Gly Gly Cys Cys Thr Cys Cys Gly Ala Gly Ala Cys Thr Thr				
	245		250	255
Thr Gly Ala Cys Ala Cys Gly Cys Thr Gly Cys Thr Cys Cys Thr Gly				
	260		265	270
Ala Gly Thr Gly Ala Cys Gly Ala Thr Gly Gly Cys Ala Ala Cys Ala				
	275		280	285
Cys Thr Cys Thr Cys Thr Ala Thr Gly Thr Gly Gly Gly Gly Cys				
	290		295	300
Thr Cys Gly Ala Gly Ala Gly Ala Cys Cys Gly Thr Cys Cys Thr Gly				
305		310		315
Gly Cys Cys Thr Thr Gly Ala Ala Thr Ala Thr Cys Cys Ala Gly Ala				
	325		330	335
Ala Cys Cys Cys Ala Gly Gly Ala Ala Thr Cys Cys Cys Ala Ala Gly				
	340		345	350
Gly Cys Thr Ala Ala Ala Gly Ala Ala Cys Ala Thr Gly Ala Thr Ala				
	355		360	365
Cys Cys Cys Thr Gly Gly Cys Cys Ala Gly Cys Cys Ala Gly Thr Gly				
	370		375	380
Ala Gly Ala Gly Ala Ala Ala Ala Ala Gly Ala Cys Cys Gly Ala				
385		390		395
Ala Thr Gly Thr Gly Cys Cys Thr Thr Thr Ala Ala Gly Ala Ala Gly				
	405		410	415
Ala Ala Gly Ala Gly Cys Ala Ala Thr Gly Ala Gly Ala Cys Ala Cys				
	420		425	430
Ala Gly Thr Gly Thr Thr Thr Cys Ala Ala Cys Thr Thr Cys Ala Thr				
	435		440	445
Thr Cys Gly Ala Gly Thr Cys Cys Thr Gly Gly Thr Cys Thr Cys Thr				
	450		455	460
Thr Ala Cys Ala Ala Thr Gly Cys Thr Ala Cys Thr Cys Ala Cys Cys				
465		470		475
Thr Cys Thr Ala Thr Gly Cys Cys Thr Gly Thr Gly Gly Ala Cys				
	485		490	495
Cys Thr Thr Thr Gly Cys Cys Thr Thr Cys Ala Gly Cys Cys Cys Thr				
	500		505	510
Gly Cys Cys Thr Gly Thr Ala Cys Cys Thr Thr Cys Ala Thr Thr Gly				
	515		520	525
Ala Ala Cys Thr Cys Cys Ala Ala Gly Ala Thr Thr Cys Cys Cys Thr				
	530		535	540
Cys Cys Thr Gly Thr Thr Gly Cys Cys Cys Ala Thr Cys Thr Thr Gly				
545		550		555
Ala Thr Ala Gly Ala Cys Ala Ala Gly Gly Thr Cys Ala Thr Gly Gly				
	565		570	575
Ala Cys Gly Gly Gly Ala Ala Gly Gly Gly Cys Cys Ala Ala Gly				
	580		585	590

Cys	Cys	Cys	Thr	Thr	Thr	Gly	Ala	Cys	Cys	Cys	Thr	Gly	Thr	Thr	Cys
		595					600					605			
Ala	Cys	Ala	Ala	Gly	Cys	Ala	Cys	Ala	Cys	Ala	Ala	Gly	Cys	Thr	Gly
	610					615					620				
Thr	Cys	Thr	Thr	Gly	Gly	Thr	Cys	Gly	Ala	Thr	Gly	Gly	Gly	Ala	Thr
625					630					635					640
Gly	Cys	Thr	Thr	Thr	Ala	Thr	Thr	Cys	Cys	Gly	Gly	Cys	Ala	Cys	Cys
				645					650					655	
Ala	Thr	Gly	Ala	Ala	Cys	Ala	Ala	Cys	Thr	Thr	Cys	Cys	Thr	Gly	Gly
		660						665					670		
Gly	Cys	Ala	Gly	Cys	Gly	Ala	Gly	Cys	Cys	Cys	Ala	Thr	Cys	Cys	Thr
	675						680					685			
Gly	Ala	Thr	Gly	Cys	Gly	Gly	Ala	Cys	Ala	Cys	Thr	Gly	Gly	Gly	Ala
	690					695					700				
Thr	Cys	Cys	Cys	Ala	Thr	Cys	Cys	Thr	Gly	Thr	Thr	Cys	Thr	Cys	Ala
705					710					715					720
Ala	Gly	Ala	Cys	Thr	Gly	Ala	Cys	Ala	Thr	Cys	Thr	Thr	Cys	Thr	Thr
				725					730						735
Ala	Cys	Gly	Cys	Thr	Gly	Gly	Cys	Thr	Gly	Cys	Ala	Cys	Gly	Cys	Gly
		740						745					750		
Gly	Ala	Thr	Gly	Cys	Cys	Thr	Cys	Cys	Thr	Thr	Cys	Gly	Thr	Gly	Gly
	755						760					765			
Cys	Ala	Gly	Cys	Cys	Ala	Thr	Cys	Cys	Ala	Thr	Cys	Cys	Ala	Cys	
	770					775				780					
Cys	Cys	Ala	Gly	Gly	Thr	Cys	Gly	Thr	Cys	Thr	Ala	Thr	Thr	Thr	Cys
785					790					795					800
Thr	Thr	Cys	Thr	Thr	Thr	Gly	Ala	Gly	Gly	Ala	Gly	Ala	Cys	Ala	Gly
				805					810						815
Cys	Cys	Ala	Gly	Cys	Gly	Ala	Gly	Thr	Thr	Thr	Gly	Ala	Cys	Thr	Thr
		820						825					830		
Cys	Thr	Thr	Thr	Gly	Ala	Ala	Gly	Ala	Gly	Cys	Thr	Gly	Thr	Ala	Thr
	835						840					845			
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	850					855					860				
Ala	Ala	Gly	Thr	Cys	Thr	Gly	Cys	Ala	Ala	Gly	Ala	Ala	Cys	Gly	Ala
865					870					875					880
Cys	Gly	Thr	Gly	Gly	Gly	Cys	Gly	Gly	Thr	Gly	Ala	Ala	Ala	Ala	Gly
				885					890						895
Cys	Thr	Gly	Cys	Thr	Gly	Cys	Ala	Gly	Ala	Ala	Gly	Ala	Ala	Gly	Thr
	900							905					910		
Gly	Gly	Ala	Cys	Cys	Ala	Cys	Cys	Thr	Thr	Cys	Cys	Thr	Cys	Ala	Ala
	915						920					925			
Ala	Gly	Cys	Cys	Cys	Ala	Gly	Thr	Thr	Gly	Cys	Thr	Cys	Thr	Gly	Cys
	930					935					940				
Gly	Cys	Thr	Cys	Ala	Gly	Cys	Cys	Ala	Gly	Gly	Gly	Cys	Ala	Gly	Cys
945					950					955					960
Thr	Gly	Cys	Cys	Ala	Thr	Thr	Cys	Ala	Ala	Cys	Ala	Thr	Cys	Ala	Thr
				965					970						975
Cys	Cys	Gly	Cys	Cys	Ala	Cys	Gly	Cys	Gly	Gly	Thr	Cys	Cys	Thr	Gly
		980						985					990		
Cys	Thr	Gly	Cys	Cys	Cys	Gly	Cys	Cys	Gly	Ala	Thr	Thr	Cys	Thr	Cys
	995						1000					1005			
Cys	Cys	Thr	Cys	Thr	Gly	Thr	Thr	Thr	Cys	Cys	Cys	Gly	Cys	Ala	Thr
	1010					1015					1020				
Cys	Thr	Ala	Cys	Gly	Cys	Ala	Gly	Thr	Cys	Thr	Thr	Thr	Ala	Cys	Cys
1025					1030					1035					1040
Thr	Cys	Cys	Cys	Ala	Gly	Thr	Gly	Gly	Cys	Ala	Gly	Gly	Thr	Thr	Gly

Ala Gly Thr Gly Thr Thr Thr Gly Cys Ala Gly Gly Cys Thr Thr Cys	1505	1510	1515	1520
Thr Cys Thr Gly Gly Ala Gly Gly Cys Ala Thr Cys Thr Gly Gly Ala		1525	1530	1535
Gly Ala Gly Thr Thr Cys Cys Cys Ala Gly Gly Gly Cys Cys Ala Ala		1540	1545	1550
Thr Thr Gly Cys Ala Gly Thr Gly Thr Cys Thr Ala Cys Gly Ala Gly		1555	1560	1565
Ala Gly Cys Thr Gly Thr Gly Thr Gly Gly Ala Cys Thr Gly Thr Gly		1570	1575	1580
Thr Gly Cys Thr Thr Gly Cys Cys Ala Gly Gly Gly Ala Cys Cys Cys		1585	1590	1595
Thr Cys Ala Cys Thr Gly Thr Gly Cys Cys Thr Gly Gly Gly Ala Cys		1605	1610	1615
Cys Cys Thr Gly Ala Ala Thr Cys Ala Ala Gly Ala Cys Thr Cys Thr		1620	1625	1630
Gly Cys Ala Gly Cys Cys Thr Thr Cys Thr Gly Thr Cys Thr Gly Gly		1635	1640	1645
Cys Thr Cys Thr Ala Cys Cys Ala Ala Gly Cys Cys Thr Thr Gly Gly		1650	1655	1660
Ala Ala Gly Cys Ala Gly Gly Ala Cys Ala Thr Gly Gly Ala Ala Cys		1665	1670	1675
Gly Cys Gly Gly Cys Ala Ala Cys Cys Cys Gly Gly Ala Gly Thr Gly		1685	1690	1695
Gly Gly Thr Ala Thr Gly Cys Ala Cys Cys Cys Gly Thr Gly Gly Cys		1700	1705	1710
Cys Cys Cys Ala Thr Gly Gly Cys Cys Ala Gly Gly Ala Gly Cys Cys		1715	1720	1725
Cys Cys Cys Gly Gly Cys Gly Thr Cys Ala Gly Ala Gly Cys Cys Cys		1730	1735	1740
Cys Cys Cys Thr Cys Ala Ala Cys Thr Ala Ala Thr Thr Ala Ala Ala		1745	1750	1755
Gly Ala Ala Gly Thr Cys Cys Thr Gly Ala Cys Ala Gly Thr Cys Cys		1765	1770	1775
Cys Cys Ala Ala Cys Thr Cys Cys Ala Thr Cys Cys Thr Gly Gly Ala		1780	1785	1790
Gly Cys Thr Gly Cys Gly Cys Thr Gly Cys Cys Cys Cys Cys Ala Cys		1795	1800	1805
Cys Thr Gly Thr Cys Ala Gly Cys Ala Cys Thr Gly Gly Cys Cys Thr		1810	1815	1820
Cys Thr Thr Ala Cys Cys Ala Cys Thr Gly Gly Ala Gly Thr Cys Ala		1825	1830	1835
Thr Gly Gly Cys Cys Gly Ala Gly Cys Cys Ala Ala Ala Ala Thr Cys		1845	1850	1855
Thr Cys Ala Gly Ala Ala Gly Cys Cys Thr Cys Thr Gly Cys Thr Ala		1860	1865	1870
Cys Cys Gly Thr Cys Thr Ala Cys Ala Ala Thr Gly Gly Cys Thr Cys		1875	1880	1885
Cys Cys Thr Cys Thr Thr Gly Cys Thr Gly Cys Thr Gly Cys Cys Gly		1890	1895	1900
Cys Ala Gly Gly Ala Thr Gly Gly Thr Gly Thr Cys Gly Gly Gly Gly		1905	1910	1915
Gly Cys Cys Thr Cys Thr Ala Cys Cys Ala Gly Thr Gly Thr Gly Thr		1925	1930	1935
Gly Gly Cys Gly Ala Cys Thr Gly Ala Gly Ala Ala Cys Gly Gly Cys		1940	1945	1950
Thr Ala Cys Thr Cys Ala Thr Ala Cys Cys Cys Thr Gly Thr Gly Gly				

1955					1960					1965					
Thr	Cys	Thr	Cys	Cys	Thr	Ala	Thr	Thr	Gly	Gly	Gly	Thr	Ala	Gly	Ala
1970					1975					1980					
Cys	Ala	Gly	Cys	Cys	Ala	Gly	Gly	Ala	Cys	Cys	Ala	Gly	Cys	Cys	Cys
1985					1990					1995					2000
Cys	Thr	Gly	Gly	Cys	Gly	Cys	Thr	Gly	Gly	Ala	Cys	Cys	Cys	Thr	Gly
				2005					2010					2015	
Ala	Gly	Cys	Thr	Gly	Gly	Cys	Gly	Gly	Gly	Cys	Gly	Thr	Thr	Cys	Cys
			2020					2025					2030		
Cys	Cys	Gly	Thr	Gly	Ala	Gly	Cys	Gly	Thr	Gly	Thr	Gly	Cys	Ala	Gly
		2035					2040					2045			
Gly	Thr	Cys	Cys	Cys	Gly	Cys	Thr	Gly	Ala	Cys	Cys	Ala	Gly	Gly	Gly
	2050					2055					2060				
Thr	Cys	Gly	Gly	Ala	Gly	Gly	Cys	Gly	Gly	Ala	Gly	Cys	Thr	Thr	Cys
2065					2070					2075					2080
Cys	Ala	Thr	Gly	Gly	Cys	Thr	Gly	Cys	Cys	Cys	Ala	Gly	Cys	Gly	Gly
			2085					2090						2095	
Thr	Cys	Cys	Thr	Ala	Cys	Thr	Gly	Gly	Cys	Cys	Cys	Cys	Ala	Thr	Thr
			2100					2105					2110		
Thr	Thr	Cys	Thr	Cys	Ala	Thr	Cys	Gly	Thr	Thr	Ala	Cys	Cys	Gly	Thr
		2115					2120					2125			
Cys	Cys	Thr	Cys	Cys	Thr	Gly	Gly	Cys	Cys	Ala	Thr	Cys	Gly	Thr	Gly
	2130					2135					2140				
Cys	Thr	Cys	Cys	Thr	Gly	Gly	Gly	Ala	Gly	Thr	Gly	Cys	Thr	Cys	Ala
2145					2150					2155					2160
Cys	Thr	Cys	Thr	Cys	Cys	Thr	Cys	Cys	Thr	Cys	Gly	Cys	Thr	Thr	Cys
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Cys	Cys	Cys	Ala	Cys	Thr	Gly	Gly	Gly	Gly	Cys	Gly	Cys	Thr	Gly	
			2180				2185					2190			
Cys	Gly	Gly	Gly	Cys	Thr	Cys	Gly	Gly	Gly	Thr	Ala	Ala	Gly	Gly	
	2195						2200				2205				
Thr	Thr	Cys	Ala	Gly	Gly	Gly	Cys	Thr	Gly	Thr	Gly	Gly	Ala	Thr	
	2210					2215					2220				
Gly	Cys	Thr	Gly	Cys	Cys	Cys	Cys	Cys	Cys	Ala	Gly	Gly	Gly	Ala	Ala
2225					2230					2235					2240
Ala	Ala	Gly	Gly	Cys	Thr	Cys	Cys	Ala	Cys	Thr	Gly	Ala	Gly	Cys	Ala
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Gly	Gly	Gly	Ala	Cys	Cys	Ala	Gly	Cys	Ala	Cys	Cys	Thr	Cys	Cys	Ala
			2260				2265					2270			
Gly	Cys	Cys	Cys	Thr	Cys	Cys	Ala	Ala	Gly	Gly	Ala	Cys	Cys	Ala	Cys
	2275						2280					2285			
Ala	Gly	Gly	Ala	Cys	Cys	Thr	Cys	Thr	Gly	Cys	Cys	Ala	Gly	Thr	Gly
	2290					2295					2300				
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2305					2310					2315					2320
Cys	Ala	Ala	Cys	Cys	Ala	Thr	Cys	Thr	Gly	Gly	Gly	Cys	Gly	Cys	Cys
			2325						2330					2335	
Gly	Ala	Ala	Gly	Thr	Gly	Gly	Cys	Thr	Thr	Ala	Ala	Ala	Cys	Ala	Gly
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Gly	Gly	Ala	Cys	Ala	Cys	Ala	Gly	Ala	Thr	Cys	Cys	Gly	Cys	Ala	Gly
	2355					2360					2365				
Cys	Thr	Gly	Ala	Gly	Cys	Ala	Gly	Ala	Gly	Cys	Ala	Ala	Gly	Cys	Cys
	2370					2375					2380				
Ala	Cys	Thr	Gly	Gly	Cys	Cys	Thr	Thr	Gly	Thr	Thr	Gly	Gly	Cys	Thr
2385					2390					2395					2400
Ala	Thr	Gly	Cys	Cys	Ala	Gly	Gly	Cys	Ala	Cys	Ala	Gly	Thr	Gly	Cys
			2405					2410						2415	

Cys Ala Cys Thr Cys Thr Gly Ala Cys Cys Ala Gly Gly Gly Thr Ala
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Gly Gly Ala Gly Gly Cys Thr Cys Thr Cys Cys Thr Gly Cys Thr Ala
2435 2440 2445
Ala Cys Gly Thr Gly Thr Gly Thr Cys Ala Cys Cys Thr Ala Cys Ala
2450 2455 2460
Gly Cys Ala Cys Cys Cys Ala Gly Thr Ala Gly Gly Thr Cys Cys Thr
2465 2470 2475 2480
Cys Cys Cys Cys Thr Gly Thr Gly Gly Gly Ala Cys Thr Cys Thr Cys
2485 2490 2495
Thr Thr Cys Thr Gly Cys Ala Ala Gly Cys Ala Cys Ala Thr Thr Gly
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Gly Gly Cys Thr Gly Thr Cys Thr Cys Cys Ala Thr Ala Cys Cys Thr
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Gly Thr Ala Cys Thr Thr Gly Thr Gly Cys Thr Gly Thr Gly Ala Cys
2530 2535 2540
Ala Gly Gly Ala Ala Gly Ala Gly Cys Cys Ala Gly Ala Cys Ala Gly
2545 2550 2555 2560
Gly Thr Thr Thr Cys Thr Thr Thr Gly Ala Thr Thr Thr Thr Gly Ala
2565 2570 2575
Thr Thr Gly Ala Cys Cys Cys Ala Ala Gly Ala Gly Cys Cys Cys Thr
2580 2585 2590
Gly Cys Cys Thr Gly Thr Ala Ala Cys Ala Ala Ala Cys Gly Thr Gly
2595 2600 2605
Cys Thr Cys Cys Ala Gly Gly Ala Gly Ala Cys Cys Ala Thr Gly Ala
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Ala Ala Gly Gly Thr Gly Thr Gly Gly Cys Thr Gly Thr Cys Thr Gly
2625 2630 2635 2640
Gly Gly Ala Thr Thr Cys Thr Gly Thr Gly Gly Thr Gly Ala Cys Ala
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2660 2665 2670
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2675 2680 2685
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2690 2695 2700
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2705 2710 2715 2720
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2850 2855 2860
Thr Thr Gly Gly Ala Cys Ala Gly Ala Thr Thr Gly Thr Thr Ala Thr

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Gly	Cys	Thr	Ala	Gly	Ala	Ala	Thr	Gly	Gly	Gly	Gly	Gly	Cys	Ala	Thr
			2900					2905						2910	
Ala	Ala	Thr	Cys	Thr	Gly	Ala	Gly	Cys	Cys	Thr	Thr	Gly	Thr	Thr	Cys
		2915					2920					2925			
Cys	Cys	Thr	Thr	Gly	Thr	Cys	Cys	Ala	Gly	Thr	Gly	Thr	Gly	Gly	Cys
	2930					2935				2940					
Thr	Gly	Ala	Cys	Cys	Cys	Thr	Thr	Gly	Ala	Cys	Cys	Thr	Cys	Thr	Thr
2945					2950				2955					2960	
Cys	Cys	Thr	Thr	Cys	Cys	Thr	Cys	Cys	Thr	Cys	Cys	Cys	Thr	Thr	Thr
			2965					2970					2975		
Gly	Thr	Thr	Thr	Thr	Gly	Gly	Gly	Ala	Thr	Thr	Cys	Ala	Gly	Ala	Ala
			2980					2985					2990		
Ala	Ala	Cys	Thr	Gly	Cys	Thr	Thr	Gly	Thr	Cys	Ala	Cys	Ala	Gly	Ala
	2995					3000					3005				
Cys	Ala	Ala	Thr	Thr	Thr	Ala	Thr	Thr	Thr	Thr	Thr	Thr	Ala	Thr	Thr
	3010					3015				3020					
Ala	Ala	Ala	Ala	Ala	Ala	Gly	Ala	Thr	Ala	Thr	Ala	Ala	Gly	Cys	Thr
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<210> 445

<211> 398

<212> PRT

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<400> 445

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Met	Asn	Ile	Ser	Gln	Met	Ile	Thr	Tyr	Trp	Gly	Tyr	Pro	Asn	Glu	Glu
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Tyr	Glu	Val	Val	Thr	Glu	Asp	Gly	Tyr	Ile	Leu	Glu	Val	Asn	Arg	Ile
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Pro	Tyr	Gly	Lys	Lys	Asn	Ser	Gly	Asn	Thr	Gly	Gln	Arg	Pro	Val	Val
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Phe	Leu	Gln	His	Gly	Leu	Leu	Ala	Ser	Ala	Thr	Asn	Trp	Ile	Ser	Asn
				85					90					95	
Leu	Pro	Asn	Asn	Ser	Leu	Ala	Phe	Ile	Leu	Ala	Asp	Ala	Gly	Tyr	Asp
		100						105					110		
Val	Trp	Leu	Gly	Asn	Ser	Arg	Gly	Asn	Thr	Trp	Ala	Arg	Arg	Asn	Leu
	115						120					125			
Tyr	Tyr	Ser	Pro	Asp	Ser	Val	Glu	Phe	Trp	Ala	Phe	Ser	Phe	Asp	Glu
	130					135					140				
Met	Ala	Lys	Tyr	Asp	Leu	Pro	Ala	Thr	Ile	Asp	Phe	Ile	Val	Lys	Lys
145					150					155					160
Thr	Gly	Gln	Lys	Gln	Leu	His	Tyr	Val	Gly	His	Ser	Gln	Gly	Thr	Thr
			165						170					175	
Ile	Gly	Phe	Ile	Ala	Phe	Ser	Thr	Asn	Pro	Ser	Leu	Ala	Lys	Arg	Ile
		180						185					190		
Lys	Thr	Phe	Tyr	Ala	Leu	Ala	Pro	Val	Ala	Thr	Val	Lys	Tyr	Thr	Lys
	195						200					205			
Ser	Leu	Ile	Asn	Lys	Leu	Arg	Phe	Val	Pro	Gln	Ser	Leu	Phe	Lys	Phe
	210					215					220				
Ile	Phe	Gly	Asp	Lys	Ile	Phe	Tyr	Pro	His	Asn	Phe	Phe	Asp	Gln	Phe
225					230					235					240
Leu	Ala	Thr	Glu	Val	Cys	Ser	Arg	Glu	Met	Leu	Asn	Leu	Leu	Cys	Ser
			245						250					255	
Asn	Ala	Leu	Phe	Ile	Ile	Cys	Gly	Phe	Asp	Ser	Lys	Asn	Phe	Asn	Thr
		260					265						270		
Ser	Arg	Leu	Asp	Val	Tyr	Leu	Ser	His	Asn	Pro	Ala	Gly	Thr	Ser	Val
	275					280						285			
Gln	Asn	Met	Phe	His	Trp	Thr	Gln	Ala	Val	Lys	Ser	Gly	Lys	Phe	Gln
	290					295						300			
Ala	Tyr	Asp	Trp	Gly	Ser	Pro	Val	Gln	Asn	Arg	Met	His	Tyr	Asp	Gln
305					310					315					320
Ser	Gln	Pro	Pro	Tyr	Asn	Val	Thr	Ala	Met	Asn	Val	Pro	Ile	Ala	
			325						330					335	
Val	Trp	Asn	Gly	Gly	Lys	Asp	Leu	Leu	Ala	Asp	Pro	Gln	Asp	Val	Gly
		340					345						350		
Leu	Leu	Leu	Pro	Lys	Leu	Pro	Asn	Leu	Ile	Tyr	His	Lys	Glu	Ile	Pro
	355						360					365			
Phe	Tyr	Asn	His	Leu	Asp	Phe	Ile	Trp	Ala	Met	Asp	Ala	Pro	Gln	Glu
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Val	Tyr	Asn	Asp	Ile	Val	Ser	Met	Ile	Ser	Glu	Asp	Lys	Lys		
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			20					25					30				
Thr	Gly	Gly	Gln	Gly	Pro	Met	Pro	Arg	Val	Lys	Tyr	His	Ala	Gly	Asp		
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Gly	His	Arg	Ala	Leu	Ser	Phe	Phe	Gln	Gln	Lys	Gly	Leu	Arg	Asp	Phe		
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Asp	Thr	Leu	Leu	Leu	Ser	Asp	Asp	Gly	Asn	Thr	Leu	Tyr	Val	Gly	Ala		
65					70					75					80		
Arg	Glu	Thr	Val	Leu	Ala	Leu	Asn	Ile	Gln	Asn	Pro	Gly	Ile	Pro	Arg		
				85					90					95			
Leu	Lys	Asn	Met	Ile	Pro	Trp	Pro	Ala	Ser	Glu	Arg	Lys	Lys	Thr	Glu		
			100					105						110			
Cys	Ala	Phe	Lys	Lys	Lys	Ser	Asn	Glu	Thr	Gln	Cys	Phe	Asn	Phe	Ile		
		115					120					125					
Arg	Val	Leu	Val	Ser	Tyr	Asn	Ala	Thr	His	Leu	Tyr	Ala	Cys	Gly	Thr		
	130					135						140					
Phe	Ala	Phe	Ser	Pro	Ala	Cys	Thr	Phe	Ile	Glu	Leu	Gln	Asp	Ser	Leu		
145					150					155					160		
Leu	Leu	Pro	Ile	Leu	Ile	Asp	Lys	Val	Met	Asp	Gly	Lys	Gly	Gln	Ser		
				165				170						175			
Pro	Leu	Thr	Leu	Phe	Thr	Ser	Thr	Gln	Ala	Val	Leu	Val	Asp	Gly	Met		
			180					185						190			
Leu	Tyr	Ser	Gly	Thr	Met	Asn	Asn	Phe	Leu	Gly	Ser	Glu	Pro	Ile	Leu		
		195				200						205					
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 Val Cys Arg Gln Leu Gly Cys Gly Ala Ala Ile Gly Phe Pro Gly Gly
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Lys	Asp	Tyr	Arg	Asn	Asp	Gly	Tyr	Asn	His	Gly	Arg	Asp	Ala	Gly	Val	115	120	125
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Glu	Leu	Trp	Val	Cys	Pro	Arg	Val	Pro	Cys	Pro	Gly	Gly	Thr	Cys	His	210	215	220
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<210> 450

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Domain consensus sequence

<221> VARIANT

<222> (1)...(1)

<223> Xaa at position 1 can be L, I or V

<221> VARIANT

<222> (2)...(2)

<223> Xaa at position 2 can be any amino acid

<221> VARIANT

<222> (3)...(3)

<223> Xaa at position 3 can be L, I or V

<221> VARIANT

<222> (4)...(5)

<223> Xaa at positions 4 and 5 can be any amino acid.
One or both of residues 4 and 5 can be present.

<221> VARIANT

<222> (7)...(7)

<223> Xaa at position 7 can be any amino acid

<221> VARIANT

<222> (10)...(10)

<223> Xaa at position 10 can be N or H

<221> VARIANT

<222> (11)...(11)
 <223> Xaa at position 11 can be any amino acid

 <400> 450
 Xaa Xaa Xaa Xaa Xaa Asp Xaa Asn Asp Xaa Xaa Pro
 1 5 10

 <210> 451
 <211> 16
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Domain consensus sequence

 <221> VARIANT
 <222> (1)...(1)
 <223> Xaa at position 1 can be L, I, A or T

 <221> VARIANT
 <222> (2)...(4)
 <223> Xaa at positions 2, 3 and 4 can be any amino acid

 <221> VARIANT
 <222> (6)...(7)
 <223> Xaa at positions 6 and 7 can be any amino acid.
 One or both of of residues 6 and 7 can be present.

 <221> VARIANT
 <222> (8)...(8)
 <223> Xaa at position 8 can be P or E

 <221> VARIANT
 <222> (9)...(10)
 <223> Xaa at positions 9 and 10 can be any amino acid

 <221> VARIANT
 <222> (11)...(11)
 <223> Xaa at position 11 can be L, I, V, M, F or Y

 <221> VARIANT
 <222> (12)...(12)
 <223> Xaa at position 12 can be D, E, N, Q or S

 <221> VARIANT
 <222> (13)...(13)
 <223> Xaa at position 13 can be S, T or A

 <221> VARIANT
 <222> (14)...(14)
 <223> Xaa at position 14 can be A or V

 <221> VARIANT
 <222> (15)...(15)
 <223> Xaa at position 15 can be L, I, V, M, F or Y

<400> 451
Xaa Xaa Xaa Xaa Trp Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1 5 10 15

<210> 452
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Domain consensus sequence

<221> VARIANT
<222> (1)...(1)
<223> Xaa at position 1 can be G, S, T, A, L, I, V, or N

<221> VARIANT
<222> (2)...(3)
<223> Xaa at positions 2 and 3 can be any amino acid

<221> VARIANT
<222> (6)...(6)
<223> Xaa at position 6 can be L, I, V, M, F, Y, or W

<221> VARIANT
<222> (7)...(7)
<223> Xaa at position 7 can be D, E, G, H, R, K, or P

<221> VARIANT
<222> (9)...(9)
<223> Xaa at position 9 can be any amino acid

<221> VARIANT
<222> (10)...(10)
<223> Xaa at position 10 can be L, I, V, M, F, Y, W, G,
S, P, or Q

<400> 452
Xaa Xaa Xaa His Glu Xaa Xaa His Xaa Xaa
1 5 10

<210> 453
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Domain consensus sequence

<221> VARIANT
<222> (4)...(4)
<223> Xaa at position 4 can be G or N

<221> VARIANT

<222> (5)...(5)
 <223> Xaa at position 5 can be any amino acid

 <221> VARIANT
 <222> (7)...(7)
 <223> Xaa at position 7 can be D or R

 <221> VARIANT
 <222> (8)...(8)
 <223> Xaa at position 8 can be L, I, V, S, A, P, K, or Q

 <221> VARIANT
 <222> (1)...(8)
 <223> Xaa = Any Amino Acid

 <400> 453
 Pro Arg Cys Xaa Xaa Pro Xaa Xaa
 1 5

 <210> 454
 <211> 38
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Domain consensus sequence

 <221> VARIANT
 <222> (1)...(12)
 <223> Xaa at positions, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10,
 11 and 12 can be any amino acid

 <221> VARIANT
 <222> (14)...(16)
 <223> Xaa at positions 14, 15 and 16 can be any amino
 acid

 <221> VARIANT
 <222> (18)...(18)
 <223> Xaa at position 18 can be any amino acid

 <221> VARIANT
 <222> (20)...(25)
 <223> Xaa at positions 20, 21, 22, 23, 24 and 25 can be
 any amino acid

 <221> VARIANT
 <222> (26)...(26)
 <223> Xaa at position 26 can be D, E or N

 <221> VARIANT
 <222> (27)...(27)
 <223> Xaa at position 27 can be any amino acid

 <221> VARIANT
 <222> (28)...(28)

<221> VARIANT
 <222> (8)...(9)
 <223> Xaa at positions 8 and 9 can be any amino acid

<221> VARIANT
 <222> (11)...(16)
 <223> Xaa at positions 11, 12, 13, 14, 15 and 16 can be any amino acid

<221> VARIANT
 <222> (19)...(20)
 <223> Xaa at positions 19 and 20 can be any amino acid

<221> VARIANT
 <222> (22)...(24)
 <223> Xaa at positions 22, 23 and 24 can be any amino acid

<221> VARIANT
 <222> (25)...(25)
 <223> Xaa at position 25 can be F, Y or W

<221> VARIANT
 <222> (26)...(33)
 <223> Xaa at positions 26, 27, 28, 29, 30, 31, 32 and 33 can be any amino acid

<221> VARIANT
 <222> (35)...(37)
 <223> Xaa at positions 35, 36 and 37 can be any amino acid

<400> 456
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 1 5 10 15
 Trp Gly Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 20 25 30
 Xaa Cys Xaa Xaa Xaa Gly
 35

<210> 457
 <211> 26
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Domain consensus sequence

<221> VARIANT
 <222> (1)...(3)
 <223> Xaa at positions 1, 2 and 3 can be any amino acid

<221> VARIANT
 <222> (5)...(5)

<223> Xaa at position 5 can be any amino acid

<221> VARIANT
 <222> (6)...(6)
 <223> Xaa at position 6, when present, can be any amino acid

<221> VARIANT
 <222> (7)...(7)
 <223> Xaa at position 7 can be E or Q

<221> VARIANT
 <222> (8)...(11)
 <223> Xaa at positions 8, 9, 10 and 11 can be any amino acid

<221> VARIANT
 <222> (12)...(12)
 <223> Xaa at position 12 can be L, I, V or M

<221> VARIANT
 <222> (13)...(13)
 <223> Xaa at position 13, when present, can be any amino acid

<221> VARIANT
 <222> (14)...(14)
 <223> Xaa at position 14 can be E, Q or K

<221> VARIANT
 <222> (15)...(25)
 <223> Xaa at positions 15, 16, 17, 18, 19, 20, 21, 22, 23, 24 and 25 can be any amino acid

<400> 457
 Xaa Xaa Xaa Leu Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 1 5 10 15
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Pro
 20 25

<210> 458
 <211> 22
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Leucine Zipper Region of TANGO 366

<400> 458
 Leu Asp Leu Ser Gly Thr Asn Leu Val Pro Leu Pro Glu Ala Leu Leu
 1 5 10 15
 Leu His Leu Pro Ala Leu
 20

<210> 459
 <211> 22
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Leucine Zipper Region of INTERCEPT 217

<400> 459
 Leu Ser Cys Thr Gly Leu Gly Leu Gln Asp Val Pro Ala Glu Leu Pro
 1 5 10 15
 Ala Ala Thr Ala Asp Leu
 20

<210> 460
 <211> 22
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Leucine Zipper Region of TANGO 331

<400> 460
 Leu Glu Ala Gln Glu Glu His Leu Glu Ala Trp Trp Leu Gln Leu Lys
 1 5 10 15
 Ser Glu Tyr Pro Asp Leu
 20